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NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG	15	CAOLD to be discontinued on December 31, 2008
NEWS	3	OCT	07	EPFULL enhanced with full implementation of EPC2000
NEWS	4	OCT	07	Multiple databases enhanced for more flexible patent
				number searching
NEWS	5	OCT	22	Current-awareness alert (SDI) setup and editing
				enhanced
NEWS	6	OCT	22	WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
				Applications
NEWS	7	OCT	24	CHEMLIST enhanced with intermediate list of
				pre-registered REACH substances
NEWS	8	NOA	21	CAS patent coverage to include exemplified prophetic
				substances identified in English-, French-, German-,
NEWS	0	NOTE	26	and Japanese-language basic patents from 2004-present MARPAT enhanced with FSORT command
NEWS		NOV		MEDLINE year-end processing temporarily halts
MEMS	10	NOV	20	availability of new fully-indexed citations
NEWS	11	NOV	26	CHEMSAFE now available on STN Easy
NEWS		NOV		Two new SET commands increase convenience of STN
112110		1101	20	searching
NEWS	13	DEC	01	ChemPort single article sales feature unavailable
NEWS				GBFULL now offers single source for full-text
				coverage of complete UK patent families
NEWS	EXP	RESS		E 27 08 CURRENT WINDOWS VERSION IS V8.3,
			AND	CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.
NEWS				N Operating Hours Plus Help Desk Availability
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NEWS	IPC:	В	Fo:	r general information regarding STN implementation of IPC
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DICTIONARY FILE UPDATES: 14 DEC 2008 HIGHEST RN 1084385-33-0

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ENTRY SESSION
FULL ESTIMATED COST
0.46
0.67

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

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http://www.cas.org/legal/infopolicy.html

=> s L1 SSS full

L1 NOT FOUND

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=> d his

(FILE 'HOME' ENTERED AT 09:54:12 ON 16 DEC 2008)

FILE 'REGISTRY' ENTERED AT 09:54:22 ON 16 DEC 2008

FILE 'CAPLUS' ENTERED AT 09:54:37 ON 16 DEC 2008

=> file reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY

ENTRY SESSION 0.48 1.15

TOTAL

FILE 'REGISTRY' ENTERED AT 09:54:52 ON 16 DEC 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 14 DEC 2008 HIGHEST RN 1084385-33-0 DICTIONARY FILE UPDATES: 14 DEC 2008 HIGHEST RN 1084385-33-0

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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-14-70 10

G1:0,S,N,[*1],[*2]

G2:H,CH3

Match level :

chain nodes :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 18:CLASS 19:CLASS 20:CLASS 23:CLASS 23:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

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^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

0.46

1.61

FULL ESTIMATED COST

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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=> s 11 SSS full REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 09:55:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 11696 TO ITERATE

100.0% PROCESSED 11696 ITERATIONS SEARCH TIME: 00.00.01 127 ANSWERS

L2 127 SEA SSS FUL L1

L3 43 L2

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 43 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:908277 CAPLUS Full-text
DOCUMENT NUMBER: 149:369113

DOCUMENT NUMBER: 149:369113
TITLE: Structural diversity in the first metal complexes of

2,5-dicarboxamidopyrroles and

2,5-dicarbothioamidopyrroles
AUTHOR(S): Bates, Gareth W.; Gale, Philip A.; Light, Mark E.;

Ogden, Mark I.; Warriner, Colin N.

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Dalton Transactions (2008), (31), 4106-4112

CODEN: DTARAF; ISSN: 1477-9226

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

Metal complexes of 2,5-dicarboxamidopyrroles and 2,5-dicarbothioamidopyrroles AB were structurally characterized for the first time, complementing the significant amount of work that is reported for the analogous pyridine ligands. N, N'-Bis(3,5-dinitrophenyl)-3,4-diphenyl-1H- pyrrole-2,5dicarboxamide forms octahedral bis(tridentate) complexes with Co(III) and Ni(II), where the ligands are bound to the metal centers through deprotonated pyrrole and amide N atoms. N, N'-Dibutyl-3, 4-diphenyl-1H-pyrrole-2, 5dicarboxthioamide and N, N'-diphenyl-3, 4-diphenyl-1H-pyrrole-2, 5dicarboxthioamide also form bis(tridentate) Co complexes, but are only deprotonated at the pyrrole N atom, the remainder of the coordination sphere comprising the thioamide S atoms. The di-Bu derivative was isolated as a Co(II) complex, whereas the di-Ph system deposited a Co(III) complex. In contrast, N,N'-dibutyl-3,4-dichloro-1H-pyrrole-2,5-dicarboxamide was found to act as a bidentate ligand in an octahedral Co(II) complex comprising two bidentate pyrrole liqands and two aqua liqands. Synthesis of N, N-bis(pyridin-2-ylmethyl)-3,4-diphenyl-1H-pyrrole-2,5-carboxamide gave a pyrrole ligand with

IT 1058152-04-7P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

increased denticity. Reaction with cobalt(II) chloride gave a dinuclear helicate complex. The ligand had undergone addition of a methoxy group to one of the linking methylene carbons, presumably as a result of the oxidative

(crystal structure; preparation of cobalt and nickel complexes of dicarboxamidopyrrole and dicarbothioamidopyrrole)

RN 1058152-04-7 CAPLUS

addition of solvent MeOH.

CN 1H-Pyrrole-2,5-dicarboxamide, 3,4-diphenyl-N2,N5-bis(2-pyridinylmethyl)-(CA INDEX NAME)

IT 365214-49-9 365214-50-2 566932-85-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of cobalt and nickel complexes of dicarboxamidopyrrole and dicarbothioamidopyrrole)

RN 365214-49-9 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-dibuty1-3,4-diphenyl- (CA INDEX NAME)

RN 365214-50-2 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5,3,4-tetraphenyl- (CA INDEX NAME)

RN 566932-85-2 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(3,5-dinitrophenyl)-3,4-diphenyl-(CA INDEX NAME)

IT 1058151-99-7P 1058152-02-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cobalt and nickel complexes of dicarboxamidopyrrole and dicarbothioamidopyrrole)

RN 1058151-99-7 CAPLUS

CN 1H-Pyrrole-2,5-dicarbothioamide, N2,N5,3,4-tetraphenyl- (CA INDEX NAME)

RN 1058152-02-5 CAPLUS

CN 1H-Pyrrole-2,5-dicarbothioamide, N2,N5-dibutyl-3,4-diphenyl- (CA INDEX NAME)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:696589 CAPLUS Full-text

DOCUMENT NUMBER: 149:143220

Thermodynamic and Structure Guided Design of Statin TITLE:

Based Inhibitors of 3-Hydroxy-3-Methylglutaryl

Coenzyme A Reductase

AUTHOR(S): Sarver, Ronald W.; Bills, Elizabeth; Bolton, Gary; Bratton, Larry D.; Caspers, Nicole L.; Dunbar, James

B.; Harris, Melissa S.; Hutchings, Richard H.; Kennedy, Robert M.; Larsen, Scott D.; Pavlovsky,

Alexander; Pfefferkorn, Jeffrev A.; Bainbridge, Graeme CORPORATE SOURCE:

Pfizer Global Research + Development, Ann Arbor, MI, 48105, USA

SOURCE: Journal of Medicinal Chemistry (2008), 51(13), 3804-3813

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

AB Clin. studies have demonstrated that statins, 3-hydroxy-3-methylglutaryl CoA reductase (HMGR) inhibitors, are effective at lowering mortality levels associated with cardiovascular disease; however, 2-7% of patients may experience statin-induced myalgia that limits compliance with a treatment regimen. High resolution crystal structures, thermodn, binding parameters, and biochem, data were used to design statin inhibitors with improved HMGR

affinity and therapeutic index relative to statin-induced myalgia. These studies facilitated the identification of imidazole 1 as a potent (IC50 = 7.9 nM) inhibitor with excellent hepatoselectivity (>1000-fold) and good in vivo efficacy. The binding of 1 to HMGR was enthalpically driven with a ΔH of -17.7 kcal/M. Addnl., a second novel series of bicyclic pyrrole-based inhibitors was identified that induced order in a protein flap of HMGR. Similar ordering was detected in a substrate complex, but has not been reported in previous statin inhibitor complexes with HMGR.

IT 1037300-11-0 1037300-16-5

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermodn. and structure guided design of statin based inhibitors of HMGCoA reductase)

1037300-11-0 CAPLUS

1H-Pyrrole-2-heptanoic acid, 5-[[[4-(aminosulfonyl)phenyl]amino]carbonyl]- $3-(4-fluorophenv1)-\beta$, δ -dihvdroxv-1-methvl-4-phenvl-, (βR, δR) - (CA INDEX NAME)

Absolute stereochemistry.

RN

CN

RN 1037300-16-5 CAPLUS

CN 1H-Pyrrole-2-heptanoic acid, 3,4-bis(4-fluorophenyl)- β , δ -dihydroxy-1-methyl-5-[(phenylamino)carbonyl]-, (β R, δ R)- (CA INDEX NAME)

Absolute stereochemistry.

- IT 1037300-12-1 1037300-13-2 1037300-14-3 1037300-15-4 1037300-17-6
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (thermodn. and structure guided design of statin based inhibitors of HMGCoA reductase)
- RN 1037300-12-1 CAPLUS
- CN 1H-Pyrrole-2-heptanoic acid, 3-(4-fluorophenyl)- β , δ -dihydroxy-4-methyl-5-[(phenylamino)carbonyl]-, (β R, δ R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 1037300-13-2 CAPLUS
- CN 1H-Pyrrole-2-heptanoic acid, 5-[[[4-

[(dimethylamino)carbonyl]phenyl]amino]carbonyl]-3,4-bis(4-fluorophenyl)- β , δ -dihydroxy-1-methyl-, (β R, δ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1037300-14-3 CAPLUS

CN lH-Pyrrole-2-heptanoic acid, 3-(4-fluorophenyl)- β , δ -dihydroxy-1-methyl-5-[[(5-methyl-2-pyrazinyl)methyl]amino]carbonyl]-4-phenyl-, (β R, δ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1037300-15-4 CAPLUS

CN 1H-Pyrrole-2-heptanoic acid, 3-(4-fluorophenyl)-β,δ-dihydroxy-5-[[[4-(methoxycarbonyl)phenyl]amino]carbonyl]-1-methyl-4-phenyl-, (βR,δR)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1037300-17-6 CAPLUS

1H-Pyrrole-2-heptanoic acid, 3,4-bis(4-fluorophenyl)- β , δ -CN dihydroxy-1-methyl-5-[[(3-methylphenyl)amino]carbonyl]-, $(\beta R, \delta R)$ - (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:43435 CAPLUS Full-text DOCUMENT NUMBER: 148:144656

Preparation of pyridinonyl PDK1 inhibitors TITLE: INVENTOR(S): Lind, Kenneth Egnard; Cao, Kathy; Lin, Edward

Yin-Shiang; Nguyen, Thinh Ba; Tangonan, Bradley T.; Erlanson, Daniel A.; Guckian, Kevin; Simmons, Robert Lowell; Lee, Wen-Cherng; Sun, Lihong; Hansen, Stig;

Pathan, Nuzhat; Zhang, Lei

Sunesis Pharmaceuticals, USA; Biogen Idec, Inc. PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 311pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN		DATE			APPLICATION NO.						DATE		
WO 2008005457				A2 200801			0110							20070702				
WO	2008	0054	57		A3		2008	0724										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA						

OTHER SOURCE(S): MARPAT 148:144656

GI

AB The title compds. I [n = 1-5; L1, L2 = a bond, O, NH, S, S(O), S(O)2, (hetero)alkylene; X = a bond, (hetero)cycloalkylene, (hetero)arylene; R1 = (hetero)cycloalkyl, (hetero)aryl; R2, R4-R8 = H, halo, OH, CF3, etc.; R3 = H, OH, CF3, alkyl, etc.], useful as 3-phosphoinositide-dependent protein kinase-1 (FDKH) inhibitors for treating cancer, were prepared E.g., a 2-step synthesis of II, starting from tert-Bu (5-aminopentyl)carbamate and 1-(3-chlorobenzyl)-2-oxo-1,2-dihydropyridine-3-carboxylic acid, was given. Exemplified compds! I were tested for FDKI inhibitory activity in various assays (data given). Pharmaceutical commostiton commorsing the compound I is disclosed.

II

T 1001408-83-8P 1001408-97-4P RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridinonyl PDK1 inhibitors for treating cancer) RN 1001408-83-8 CAPLUS

RN 1001408-83-8 CAPLUS
CN 3-Pyridinecarboxamic

3-Pyridinecarboxamide, N-[[3-[5-(aminocarbonyl)-1H-pyrrol-3-yl]phenyl]methyl]-1-[(3,4-difluorophenyl)methyl]-1,2-dihydro-2-oxo-(CAINDEX NAME)

$$_{H_{2}N} = \underbrace{\overset{\circ}{\mathbb{L}}}_{H_{2}} - \underbrace{\overset{\circ}{\mathbb{L}}}_{H$$

L3 ANSWER 4 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:902048 CAPLUS Full-text

DOCUMENT NUMBER: 147:427173

TITLE: Regioselective Synthesis of Highly Aryl-Substituted

Pyrrole Carboxylates as Useful Medicinal Chemistry

AUTHOR(S): Bhatt, Ulhas; Duffy, Bryan C.; Guzzo, Peter R.; Cheng,

Leifeng; Elebring, Thomas

CORPORATE SOURCE: Albany Molecular Research, Inc., Albany, NY, USA SOURCE: Synthetic Communications (2007), 37(16), 2793-2806

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:427173

AB The regioselective syntheses of two pharmaceutically relevant pyrrole scaffolds are described. A synthetic route for the preparation of differentially substituted pyrrole-3,4-dicarboxylates is presented and exemplified. This route circumvents some of the problems and limitations associated with previous butynedioic diester condensations and 1,3-dipolar cycloaddn. reactions. A route to the related 4,5-diarylpyrrole-2-carboxylic acid scaffold is also presented. Both routes allow for the regiocontrolled preparation of highly substituted pyrrole pharmacophore cores.

IT 952019-94-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(regioselective preparation of aryl-substituted pyrrole-3,4-dicarboxylates and 2-pyrrolecarboxylates)

RN 952019-94-2 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-(4-chlorophenyl)-4-(2,4-dichlorophenyl)-N,1-dimethyl- (CA INDEX NAME)

IT 875667-50-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (regioselective preparation of aryl-substituted pyrrole-3,4-dicarboxylates and 2-pyrrolecarboxylates)

RN 875667-50-8 CAPLUS

1H-Pyrrole-2-carboxamide, 5-(4-chlorophenyl)-4-(2,4-dichlorophenyl)-1-CN methyl-N-1-piperidinyl- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:874967 CAPLUS Full-text

147:257800

11

DOCUMENT NUMBER:

TITLE:

3,4-Dihydropyrrolo[1,2-a]pyrazin-1(2H)-ones as melanin concentrating hormone receptor-1 antagonists and their preparation, pharmaceutical compositions and use in the treatment of disease

Zhao, Guohua

INVENTOR(S): PATENT ASSIGNEE(S):

Bristol-Myers Squibb Company, USA SOURCE: U.S. Pat. Appl. Publ., 34pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	ENT I				KIN	D	DATE			APPL:	ICAT:	ION	NO.		D	ATE			
						-													
US	2007	0185	097		A1		20070809		US 2007-671150					20070205					
WO	2007	0924	16		A2		20070816			WO 2007-US3099						20070206			
WO	2007	0924	16		A3	A3 20071101													
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,		
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,		
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,		
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,		
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	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,		
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,		
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,		
		KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA								
EP	1987	039			A2		2008	1105		EP 2	007-	7635	93		2	0070	206		

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, II, LI, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO::

US 2006-765530P P 20060206 W0 2007-US3099 W 20070206

OTHER SOURCE(S):

MARPAT 147:257800

GΙ

AB The application provides compds. of formula I, including all stereoisomers, solvates, prodrugs and pharmaceutically acceptable forms thereof. Addnl., the application provides pharmaceutical compns. containing at least one compound according to formula I and optionally at least one addnl. therapeutic agent. Finally, the application provides methods for treating a patient suffering from an MCHR-1 modulated disease or disorder such as, for example, obesity, diabetes, depression or anxiety by administration of a therapeutically ED of a compound according to formula I. Compds. of formula I wherein A is monocyclic (hetero)arvl and bicyclic heteroarvl; D is a bond, alkyl, cycloalkyl and heterocyclyl; Q is (un)substituted C1-4 alkyl, (un)substituted acetyl, (un)substituted carbonyl-alkyl, CO, COCO, etc.; W is a bond, CO, O, NH and derivs., SO, SO2, SO2NH and derivs., and (un)substituted methylene; Rla, Rlb, and R1c are independently H, halo, (un) substituted (hetero) aryl, (un) substituted arvloxy, (un) substituted arvlthio, and (un) substituted arylalkylthio; R2 is H, OH, lower alkoxy, hydroxyalkyl, lower cycloalkoxy, OCONH2 and derivs., CN, CONH2 and derivs., etc.; R3 is H, OH, halo, alkoxy, CN, alkyl, perfluoroalkyl, cycloalkyl, etc.; and their pharmaceutically acceptable salts, stereoisomers, solvates, and prodrug esters thereof, are claimed. Example compound II. TFA was prepared by cross-coupling of Me 4bromo-1H-pyrrole-2-carboxylate with 4-chlorophenylboronic acid; the resulting Me 4-(4-chlorophenyl)-1H-pyrrole-2-carboxylate underwent hydrolysis to give 4-(4-chlorophenyl)-1H-pyrrole-2-carboxylic acid which underwent amidation with 3-methoxy-4-(2-(pyrrolidin-1- yl)ethoxy)benzenamine to give 4-(4chlorophenyl)-N-(3-methoxy-4-(2- (pyrrolidin-1-yl)ethoxy)phenyl)-1H-pyrrole-2carboxamide, which underwent cyclization with 1,2-dibromoethane to give compound II.TFA. All the invention compds. were evaluated for their melanin concentrating hormone receptor-1 antagonistic activity. 1057107-73-9

RL: PRPH (Prophetic)

(3,4-Dihydropyrrolo[1,2-a]pyrazin-1(2H)-ones as melanin concentrating hormone receptor-1 antagonists and their preparation, pharmaceutical compositions and use in the treatment of disease) CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[4-(3-hydroxy-3-methylbutoxy)-3-methoxyphenyl]- (CA INDEX NAME)

IT 945720-32-1P 945720-37-6P 945720-40-1P

945720-43-4P 945720-44-5P 945720-45-6P

945720-46-7P 945720-47-8P 945720-48-9P

945720-49-0P 945720-50-3P 945720-51-4P 945720-52-5P 945720-55-8P 945720-58-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of dihydropyrrolopyrazinones as melanin concentrating $% \left(1\right) =\left(1\right) \left(1\right)$

hormone receptor 1 antagonists useful alone or in combination therapy of MCHR-1 - mediated diseases)

RN 945720-32-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[3-methoxy-4-[2-(1pyrrolidinyl)ethoxy]phenyl]- (CA INDEX NAME)

RN 945720-37-6 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[4-(2-hydroxy-2methylpropoxy)-3-methoxyphenyl]- (CA INDEX NAME)

RN 945720-40-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[6-[2-(1-pyrrolidinyl)ethoxy]-3-pyridinyl]- (CA INDEX NAME)

RN 945720-43-4 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chloropheny1)-N-[3-methoxy-4-[2-oxo-2-(1-pyrrolidiny1)ethoxy]pheny1]- (CA INDEX NAME)

RN 945720-44-5 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[6-[(dimethylamino)methyl]-5,6,7,8-tetrahydro-2-naphthalenyl]- (CA INDEX NAME)

RN 945720-45-6 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chloropheny1)-N-[4-[2-(1-pyrrolidiny1)ethoxy]pheny1]- (CA INDEX NAME)

RN 945720-46-7 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[4-methoxy-3-[2-(1-pyrrolidinyl)ethoxy]phenyl]- (CA INDEX NAME)

RN 945720-47-8 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chloropheny1)-N-[3-chloro-4-[2-(1-pyrrolidiny1)ethoxy]pheny1]- (CA INDEX NAME)

RN 945720-48-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[3-methoxy-4-[3-(1-pyrrolidinyl)propoxy]phenyl]- (CA INDEX NAME)

RN 945720-49-0 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[3-methoxy-4-(1pyrrolidinyl)phenyl]- (CA INDEX NAME)

$$\bigcup_{i=1}^{n}\bigcup_{j=1}^{n}\bigcup_{j=1}^{n}\bigcup_{j=1}^{$$

RN 945720-50-3 CAPLUS

CN Carbamic acid, N=[2-[4-[[[4-(4-chlorophenyl)-1H-pyrrol-2-yl]carbonyl]amino]-2-methoxyphenoxy]ethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 945720-51-4 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[3-methoxy-4-(1H-1,2,4-triazol-1-yl)phenyl]- (CA INDEX NAME)

RN 945720-52-5 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-[4-[(3R)-3-hydroxy-1-pyrrolidinyl]-3-methoxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 945720-55-8 CAPLUS
- $\begin{array}{lll} {\tt CN} & {\tt 1H-Pyrrole-2-carboxamide,} & {\tt 4-(4-chloropheny1)-N-[3-methoxy-4-[2-(1H-pyrrol-1-yl)ethoxy]pheny1]-} & ({\tt CA} & {\tt INDEX} & {\tt NAME}) \end{array}$

RN 945720-58-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chloropheny1)-N-[3-methoxy-4-[2-(tetrahydro-2-furany1)ethoxy]pheny1]- (CA INDEX NAME)

L3 ANSWER 6 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:450172 CAPLUS Full-text

DOCUMENT NUMBER: 147:72319

TITLE: Conformational control of HCl co-transporter:

imidazole functionalized isophthalamide vs.

2,6-dicarboxamidopyridine

AUTHOR(S): Gale, Philip A.; Garric, Joachim; Light, Mark E.;

McNally, Beth A.; Smith, Bradley D.

CORPORATE SOURCE: School of Chemistry, University of Southampton, Southampton, SO17 1BJ, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom)

(2007), (17), 1736-1738

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:72319

B Replacement of the central isophthalamide core in a synthetic HCl receptor, with a 2,6-dicarboxamidopyridine, leads to a more preorganized mol. structure that exhibits higher chloride affinity and membrane transport flux.

TT 864943-19-1

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(inclusion reaction; conformational control of HCl co-transporter by imidazole functionalized isophthalamide vs. 2,6-dicarboxamidopyridine)

RN 864943-19-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-methyl-N-[(1-methyl-1H-imidazol-2-yl)methyl]-

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1356739 CAPLUS Full-text

DOCUMENT NUMBER: 146:121812

TITLE: 4,5-Diarylpyrrole derivatives, their preparation, and

their therapeutic application as cannabinoid CB1

receptor antagonists

INVENTOR(S): Barth, Francis; Congy, Christian; Hortala, Laurent;

Rinaldi-Carmona, Murielle

PATENT ASSIGNEE(S): Sanofi Aventis, Fr. SOURCE: Fr. Demande, 28pp.

GOURCE: Fr. Demande, 28pp CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 20061229 FR 2005-6609 B1 20070921 A1 20070104 AU 2006-263781 FR 2887548 20050627 FR 2887548 AU 2006263781 Al 20070104 AU 2006-263781 CA 2610805 Al 20070104 CA 2006-2610805 WO 2007000505 A2 20070104 WO 2006-FR1416 WO 2007000505 A3 20071115 20060622 20060622 20060622 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA A2 20080319 EP 2006-764809 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU US 20080176924 A1 20080724 US 2007-952224 20071207 IN 2007KN04798 A 20080215 IN 2007-KN4798 20071210
MX 200716383 A 20080307 MX 2007-16383 20071218
KR 2008019641 A 20080304 KR 2007-730262 20071226
CN 101208300 A 20080625 CN 2006-80023067 20071226

NO 2008000458 PRIORITY APPLN. INFO.: A 20080124

NO 2008-458 FR 2005-6609 WO 2006-FR1416 20080124 A 20050627 W 20060622

OTHER SOURCE(S): GI MARPAT 146:121812

AB The invention provides compds. I [X = CO, SO2, or CON(R6); R1 = H or C1-4 alkyl; R2 = C1-7 alkyl, nonarom. C3-12 carbocyclyl optionally substituted by C1-4 alkyl and optionally attached via CH2, (un) substituted Ph, (un) substituted benzyl, benzhydryl, benzhydrylmethyl, 1,2,3,4tetrahydronaphthalen-2-yl optionally substituted by C1-4 alkyl, heterocycles (pyrrolyl, imidazolyl, pyridyl, pyrazolyl, furyl, or thienyl) optionally substituted by alkyl and/or halo, indol-2-yl, N-methylindol-2-yl; R3 = C1-5 alkyl or C3-7 cycloalkyl; R4, R5 = (un) substituted Ph; R6 = H or C1-4 alkyl; including bases, acid addition salts, hydrates, and/or solvates]. Also provided are a process for preparing I, and therapeutic applications of I. Claimed uses include the treatment or prevention of appetite disorders, metabolic disorders, gastrointestinal diseases, inflammatory phenomena, immune system disorders, psychotic disorders, alc. dependence, and nicotine dependence. Eighteen compds. I are described in detail, 13 of which were prepared by combinatorial methods. For instance, the ester Me 5-(4chlorophenyl)-4-(2,4-dichlorophenyl)-1H- pyrrole-2-carboxylate (prepared in 5 steps) underwent a sequence of 4 steps (hydrolysis, amidation, reduction of the carboxamide to a methylamine, and amidation of the amine with the corresponding acid chloride) to give invention compound II. Compds. I have very good in vitro affinity for cannabinoid CB1 receptors, with IC50 ≤ 5+10-7M. The antagonist nature of compds. I was demonstrated by adenylate-cyclase inhibition models, and toxicity was compatible with therapeutic use (no data). ΙT 918294-12-9P, 5-(4-Chlorophenyl)-4-(2,4-dichlorophenyl)-1-methyl-

ΙI

1H-pyrrole-2-carboxamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of diarylpyrrole derivs. as cannabinoid CB1 receptor antagonists)

RN 918294-12-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-(4-chloropheny1)-4-(2,4-dichloropheny1)-1methyl- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:699903 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 145:145709

TITLE: Preparation of heterocyclic carboxamide compounds as steroid nuclear receptors ligands

INVENTOR(S): Flatt, Brenton; Gu, Xiao-Hui; Martin, Richard; Mohan, Raju; Murphy, Brett; Nyman, Michael C.; Stevens,

William C., Jr.; Wang, Tie-Lin

PATENT ASSIGNEE(S): Exelixis, Inc., USA SOURCE: PCT Int. Appl., 196 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2006076202	A1 2006072	0 WO 2006-US319				
		, BA, BB, BG, BR, BW, BY,				
CN, CO, CR,	CU, CZ, DE, DI	, DM, DZ, EC, EE, EG, ES,	FI, GB, GD,			
GE, GH, GM,	HR, HU, ID, II	, IN, IS, JP, KE, KG, KM,	KN, KP, KR,			
KZ, LC, LK,	LR, LS, LT, LU	J, LV, LY, MA, MD, MG, MK,	, MN, MW, MX,			
MZ, NA, NG,	NI, NO, NZ, ON	1, PG, PH, PL, PT, RO, RU,	, SC, SD, SE,			
SG, SK, SL,	SM, SY, TJ, Th	1, TN, TR, TT, TZ, UA, UG,	US, UZ, VC,			
VN, YU, ZA,	ZM, ZW					
RW: AT, BE, BG,	CH, CY, CZ, DE	, DK, EE, ES, FI, FR, GB,	GR, HU, IE,			
IS, IT, LT,	LU, LV, MC, NI	, PL, PT, RO, SE, SI, SK,	TR, BF, BJ,			
CF, CG, CI,	CM, GA, GN, GO), GW, ML, MR, NE, SN, TD,	TG, BW, GH,			
), SL, SZ, TZ, UG, ZM, ZW,	, AM, AZ, BY,			
	RU, TJ, TM					
		20 AU 2006-205220				
		CA 2006-2593156				
		.7 EP 2006-717506				
		C, DK, EE, ES, FI, FR, GB,				
		C, NL, PL, PT, RO, SE, SI,	SK, TR, AL,			
BA, HR, MK,						
	T 200807	24 JP 2007-550462				
RIORITY APPLN. INFO.:		US 2005-642839P	P 20050110			

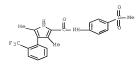
- Imidazole-4-carboxamides (I) and imidazole-2-carboxamide (II) [R1, R2 = H, AR cyano, halo, each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, or heteroaralkyl; R5 = H, each alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroarvl, or heteroaralkyl; R4 = each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl, or heteroaralkyl; R6 = H; R7 = each (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl] as single isomers, mixture of isomers, or as racemic mixts. of isomers or as solvates or polymorphs or as prodrugs or metabolites or as pharmaceutically acceptable salts thereof are prepared These compds. are useful in modulating the activity of steroid nuclear receptors and thereby for the treatment of a disease, or disorder mediated by, or otherwise affected by one or more steroid nuclear receptors (in particular mineralocorticoid receptor), or in which steroid nuclear receptor activity is implicated. The above disease or disorder is related to cancer, infertility, one or more metabolic syndromes, bone or cartilage dysfunction, immune dysfunction, cognitive dysfunction, high blood pressure, heart disease, renal disease, fibrosis, epidermal dysfunction, or muscle wasting. Thus, to a stirred mixture of 1,4-dimethyl-5-(2phenoxyphenyl)-1H-imidazole-2-carboxylic acid Et ester (202 mg, 0.60 mmol) and 4-methanesulfonylaniline (136 mg, 0.80 mmol) in toluene (5 mL, anhydrous) was added dropwise Me3Al (2.0 M in toluene, 0.4 mL, 0.8 mmol) under N at ambient temperature and the resulting mixture was stirred at 100° in a sealed vial for 10 h to give, after silica gel chromatog., 1,4-dimethyl-5-(2-phenoxyphenyl)-1H-imidazole-2-carboxylic acid (4-methanesulfonylphenyl)amide (III). III showed antagonist activity against mineralocorticoid receptor with IC50 of <0.5 uM which was ten-fold greater than the antagonist activity against androgen receptor (AR), estrogen receptor α (ER α), glucocorticoid receptor (GR), and progesterone receptor (PR).
- ΤТ 880779-28-2P, 3,5-Dimethyl-4-(2-trifluoromethylphenyl)-1H-pyrrole-2-carboxylic acid N-(4-methylsulfonylphenyl)amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of imidazolecarboxamides as modulators of steroid nuclear receptors)

880779-28-2 CAPLUS RN

CN

1H-Pyrrole-2-carboxamide, 3.5-dimethyl-N-[4-(methylsulfonyl)phenyl]-4-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:640343 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 145:188387

TITLE: Pyrrolylamidourea based anion receptors

AUTHOR(S): Evans, Louise S.; Gale, Philip A.; Light, Mark E.;

Quesada, Roberto

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: New Journal of Chemistry (2006), 30(7), 1019-1025 CODEN: NJCHE5: ISSN: 1144-0546

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:188387

AB The anion binding behavior of a number of pyrrolylamidourea and thiourea compds. have been studied in DMSC solution Mono-amidothioureapyrrole compds. were found to be deprotonated by basic anions such as fluoride, acetate, benzoate or dihydrogenphosphate with the structure of the deprotonated species elucidated by X-ray crystallog. 2, 2-Bis(amidourea)pyrroles were synthesized and found to be effective anion receptors for a range of putative anionic quests.

IT 884529-86-6P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(crystallog.; addition to aryl isocyanate; pyrrolylamidourea based anion receptors)

RN 884529-86-6 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, hydrazide (CA INDEX NAME)

IT 502141-41-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(crystallog.; addition to aryl isocyanate; pyrrolylamidourea based anion

receptors)

RN 902141-41-7 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxylic acid, 3,4-diphenyl-, 2,5-dihydrazide (CA INDEX NAME)

902141-43-9 тт

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(crystallog.; pyrrolylamidourea based anion receptors) 902141-43-9 CAPLUS

RN

CN 1-Butanaminium, N,N,N-tributyl-, 5-methyl-3,4-diphenyl-1H-pyrrole-2carboxylic acid hydrazide (1:1) (CA INDEX NAME)

CM 1

CRN 902141-42-8

CMF C25 H20 N5 O4

CM 2

CRN 10549-76-5

CMF C16 H36 N

884529-83-3P 902141-33-7P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(crystallog.; pyrrolylamidourea based anion receptors)

884529-83-3 CAPLUS RN

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-,
2-[[(4-nitrophenyl)amino]carbonyl]hydrazide (CA INDEX NAME)

RN 902141-33-7 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxylic acid, 3,4-diphenyl-, 2,5-bis[2-[(phenylamino)carbonyl]hydrazide] (CA INDEX NAME)

IT 884529-82-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(no association with anions; pyrrolylamidourea based anion receptors)

- RN 884529-82-2 CAPLUS
- CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[(phenylamino)carbonyl]hydrazide (CA INDEX NAME)

IT 902141-35-9P 902141-37-1P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREF (Preparation); PROC (Process)

(pyrrolylamidourea based anion receptors)

- RN 902141-35-9 CAPLUS
- CN 1H-Pyrrole-2,5-dicarboxylic acid, 3,4-diphenyl-,
 - 2,5-bis[2-[[(4-nitrophenyl)amino]carbonyl]hydrazide] (CA INDEX NAME)

RN 902141-37-1 CAPLUS

N 1H-Pyrrole-2,5-dicarboxylic acid, 3,4-diphenyl-, 2,5-bis[2-[[(3,5-dinitrophenyl)amino]carbonyl]hydrazide] (CA INDEX NAME)

IT 884529-84-4P 884529-85-5P

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (pyrrolylamidourea based anion receptors)

RN 884529-84-4 CAPLUS

CN

1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[(phenylamino)thioxomethyl]hydrazide (CA INDEX NAME)

$$\text{Me} \underbrace{ \begin{array}{c} \vdots \\ \text{NH} \\ \text{Ph} \\ \end{array}}_{\text{Ph}} \underbrace{ \begin{array}{c} \vdots \\ \text{NH} \\ \text{NH} \\ \end{array}}_{\text{NH}} \underbrace{ \begin{array}{c} \vdots \\ \text{NHPh} \\ \end{array}}_{\text{NHPh}}$$

RN 884529-85-5 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-,
2-[[(4-nitrophenyl)amino]thioxomethyl]hydrazide (CA INDEX NAME)

L3 ANSWER 10 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:332235 CAPLUS Full-text

DOCUMENT NUMBER: 144:350539

TITLE: Preparation of pyrrolecarboxamide derivatives as mineralocorticoid receptor antagonists for use against

cancer and other disorders

Wang, Tie-Lin; Wong, Yong; Wu, Jason H.

PATENT ASSIGNEE(S): Exelixis, Inc., USA

SOURCE: PCT Int. Appl., 477 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.										APPLICATION NO.								
	WO 2006012642																		
	2006														_				
	W:									BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KM,	KP,	KR,	KZ,		
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD	, MG,	MK,	MN,	MW,	MX,	MZ,	NA,		
		NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT	, RO,	RU,	SC,	SD,	SE,	SG,	SK,		
		SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ	, UA,	UG,	US,	UZ,	VC,	VN,	YU,		
		ZA,	ZM,	zw															
	RW:										, ES,								
											, RO,								
											, MR,								
								SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
					RU,														
	2005																		
	2573										2005-								
EP	1773																		
	R:										, ES,								
						LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	AL,		
			HR,																
	1010						2007				2005-								
	2005						2007				2005-								
	JP 2008508308						2008				2007-								
	IN 2007DN00605						2007				2007-								
	NO 2007000910 KR 2007045283						2007				2007- 2007-		0.0						
																0070			
	US 20080234270 RIORITY APPLN. INFO.:						2008	0925			2007- 2004-								
PRIORII	KIOKIII APPLN. INFO.:										2004- 2004-					0040			
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OTHER SOURCE(S): MARPAT 144:350539

GI

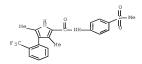
AB Pyrrolecarboxamide derivs. (shown as I; other Markush structures for pyrrolecarboxamides are defined in the claims; variables defined below; e.g. 1-[4-fluoro-2-(trifluoromethyl)phenyl]-2,5-dimethyl-1H-pyrrole-3- carboxylic acid N-[4-(sulfamoyl)phenyl]amide (II)), compns. and methods for modulating the activity of receptors are provided. In particular compds. and compns. are provided for modulating the activity of receptors and for the treatment, prevention, or amelioration of ≥1 symptoms of disease or disorder directly or indirectly related to the activity of the receptors. Semiquant. IC50 values for antagonist activity of 23 examples of I are tabulated and compared to the activity of the Spironolactone control. For I: R1 and R2 = H, halo, cyano, or (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl, or heterocyclylalkyl, or -OR9, -SR9, -N(R9)2, -C(0)OR9 or -C(0)N(R9)2; R3 = H, halo, cvano, (un) substituted alkyl, (un) substituted alkenyl or (un) substituted alkynyl; R4 is H. -C(0)R9, -S(0)2R9, or (un)substituted alkvl, alkenvl or alkvnvl, or R4 is (un) substituted cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl; R6 is H or (un) substituted alkyl; R7 is (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl; addnl. details are given in the claims. Although the methods of preparation are not claimed, prepns. and/or characterization data for many examples of I are included. For example, II was prepared in 5 steps (50, 37, 62, 64, and 66 % yields, resp.) starting with preparation of 1-[4-fluoro-2-(trifluoromethyl)phenyl]-2,5-dimethyl-1H-pyrrole from 4-fluoro-2-(trifluoromethyl)aniline and 2,5-hexanedione, followed by preparation of the following intermediates: 1-(4-fluoro-2-trifluoromethylphenyl)-2,5-dimethyl-1Hpyrrole-3- carboxaldehyde, 1-[4-fluoro-2-(trifluoromethyl)phenyl]-2,5dimethyl-1H- pyrrole-3-carboxylic acid, and 1-[4-fluoro-2-(trifluoromethyl)phenyl]-2,5- dimethyl-1H-pyrrole-3-carbonyl chloride and finally amide formation with sulfanilamide.

II 880779-28-2P, 3,5-Dimethyl-4-(2-trifluoromethylphenyl)-1H-pyrrole-2-carboxylic acid N-(4-methylsulfonylphenyl)amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrrolecarboxamide derivs. as mineralocorticoid receptor antagonists for use against cancer and other disorders)

RN 880779-28-2 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3,5-dimethyl-N-[4-(methylsulfonyl)phenyl]-4-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)



L3 ANSWER 11 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:239131 CAPLUS Full-text

DOCUMENT NUMBER: 144:467975

TITLE: Synthesis and Anion Binding Properties of

N,N'-Bispyrrol-2-yl-2,5-diamidopyrrole

AUTHOR(S): Sessler, Jonathan L.; Pantos, G. Dan; Gale, Philip A.;

Light, Mark E.

CORPORATE SOURCE: Department of Chemistry and Biochemistry and Institute

for Cellular and Molecular Biology, University of Texas at Austin, Austin, TX, 78712-0165, USA

SOURCE: Organic Letters (2006), 8(8), 1593-1596

CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:467975

AB A bispyrrol-2-yl-2,5-diamidopyrrole has been synthesized and shown to have a significantly higher affinity for oxo-anions than previous generation 2,5diamidoovrroles.

IT 886589-23-7P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and anion binding of a 3,4-diphenyl-2,5-bis(2-

pyrrolylcarbamoyl)pyrrole)

RN 886589-23-7 CAPLUS

CN 1H-Pyrrole-3,4-dicarboxylic acid, 2,2'-[(3,4-diphenyl-1H-pyrrole-2,5-diyl)bis(carbonylimino)]bis-, tetraethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:160694 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 144:424677

TITLE: Anion binding vs. deprotonation in colorimetric

pyrrolylamidothiourea based anion sensors

AUTHOR(S): Evans, Louise S.; Gale, Philip A.; Light, Mark E.;

Ouesada, Roberto

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom)

(2006), (9), 965-967

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:424677

AB A pyrrolylamidothiourea deprotonates in the presence of one equivalent of not only fluoride, but also acetate, benzoate or dihydrogen phosphate in DMSO solution with structural studies using synchrotron radiation confirming thiourea deprotonation in the solid state.

IT 884529-82-2P 884529-83-3P 884529-84-4P

864529-85-5P RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic

preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(anion binding vs. deprotonation in colorimetric pyrrolylamidothiourea
based anion sensors)

RN 884529-82-2 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[(phenylamino)carbonyl]hydrazide (CA INDEX NAME)

RN 884529-83-3 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[[(4-nitrophenyl)amino]carbonyl]hydrazide (CA INDEX NAME)

RN 884529-84-4 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[(phenylamino)thioxomethyl]hydrazide (CA INDEX NAME)

RN 884529-85-5 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, 2-[[(4-nitrophenyl)amino]thioxomethyl]hydrazide (CA INDEX NAME)

TT 884529-86-6P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and use in preparation of pyrrolylamidothiourea)

RN 884529-86-6 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 5-methyl-3,4-diphenyl-, hydrazide (CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:128973 CAPLUS Full-text

DOCUMENT NUMBER: 144:440844

TITLE: Anion binding properties of diamide derivatives of pyrrole-2, 5-diacetic acid in different solvents

AUTHOR(S): Li, Rong-qing; Gao, Zhi-hong

CORPORATE SOURCE: Department of Chemistry, Jiangsu Province Key

Laboratory for Chemistry of Low-Dimensional Materials, Huaiyin Teachers College, Huaian, 223300, Peop. Rep.

China

SOURCE: Henan Shifan Daxue Xuebao, Ziran Kexueban (2005),

33(4), 80-82, 125

CODEN: HESKER; ISSN: 1000-2367

PUBLISHER: Henan Shifan Daxue Xuebao Bianjibu DOCUMENT TYPE: Journal

OCCUMENT TIPE: Journa

LANGUAGE . Chinese

The anion binding properties of diamide derivs. of pyrrole-2,5-diacetic acid in different solvents were investigated, using 1H NMR titration techniques. These derivs, are shown to be effective receptors for oxo-anions in acetonitrile-d3 solution, with comparable binding affinities to those found for simple pyrrole-2,5-dicarboxamides, despite possessing a more flexible hydrogen bonding array. However, they display reduced affinities for all the anions studied in a more competitive solvent, DMSO-d6, as compared to the association consts, measured in acetonitrile-d3.

365214-50-2

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(anion binding properties of diamide derivs. of pyrrole-2, 5-diacetic acid in different solvents studied by using 1H NMR titration techniques) 365214-50-2 CAPLUS RN

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5,3,4-tetraphenyl- (CA INDEX NAME)

L3 ANSWER 14 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

2006:126304 CAPLUS Full-text ACCESSION NUMBER: 144:212649 DOCUMENT NUMBER:

TITLE: Preparation of 4,5-diphenylpyrrole-2-carboxamide

derivatives as antagonists of CB1 cannabinoid receptors and their therapeutic application

INVENTOR(S): Barth, Francis; Congy, Christian; Hortala, Laurent; Rinaldi Carmona, Murielle

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: Fr. Demande, 26 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
FR 2874012	A1	20060210	FR 2004-8773	20040809		
FR 2874012	B1	20080822				
AU 2005279086	A1	20060309	AU 2005-279086	20050802		
CA 2576717	A1	20060309	CA 2005-2576717	20050802		
WO 2006024777	A1	20060309	WO 2005-FR2015	20050802		
W: AE, AG, AL,	AM, AT,	AU, AZ,	BA, BB, BG, BR, BW, BY, B	Z, CA, CH,		
CN, CO, CR,	CU, CZ,	DE, DK,	DM, DZ, EC, EE, EG, ES, F	I, GB, GD,		
GE, GH, GM,	HR, HU,	ID, IL,	IN, IS, JP, KE, KG, KM, K	P, KR, KZ,		
LC, LK, LR,	LS, LT,	LU, LV,	MA, MD, MG, MK, MN, MW, M	X, MZ, NA,		
NG, NI, NO,	NZ, OM,	PG, PH,	PL, PT, RO, RU, SC, SD, S	E, SG, SK,		
SL, SM, SY,	TJ, TM,	TN, TR,	TT, TZ, UA, UG, US, UZ, V	C, VN, YU,		
ZA, ZM, ZW						
RW: AT, BE, BG,	CH, CY,	CZ, DE,	DK, EE, ES, FI, FR, GB, G	R, HU, IE,		
IS, IT, LT,	LU, LV,	MC, NL,	PL, PT, RO, SE, SI, SK, T	R, BF, BJ,		

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CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
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           KG, KZ, MD, RU, TJ, TM
    EP 1781636
                           20070509
                                     EP 2005-796087
                                                          20050802
                      A1
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           BA, HR, MK, YU
    CN 101014588
                           20070808
                                    CN 2005-80030251
                                                          20050802
    JP 2008509202
                      Т
                          20080327 JP 2007-525320
                                                          20050802
    BR 2005014235
                     A 20080603 BR 2005-14235
A1 20070628 US 2007-625616
                                                          20050802
    US 20070149596
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    US 7381727
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                          20070706 IN 2007-KN337
                                                          20070131
    MX 200701383
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                          20070305 NO 2007-1209
                                                          20070305
    KR 2007054649
                     A
                          20070529
                                     KR 2007-705467
                                                          20070308
    US 20080194581
                     A1 20080814
                                      US 2008-102412
                                                           20080414
                                      PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 144:212649
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- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. I [R1 = H, alkyl; R2 = alkyl, 1,2,3,4-tetrahydronaphthalen-1-yl, 1,2,3,4-tetrahydronaphthalen-2-vl, (un)substituted heterocyclyl, phenylalkylene, etc.; or NR1R2 = (un)substituted piperazin-1-yl, 1,4-diazepan-1-yl, piperidin-1-yl, pyrrolidin-1-yl; R3-R8 = independently H, halo, alkyl, alkoxy, CF3, etc.; R9 = alkyl; and their free bases, and their acid addition salts, hydrates and solvates) were prepared as antagonists of CB1 cannabinoid receptors and for treatment of the diseases it implies. For instance, II (m.p. = 165°) was prepared in 7 steps via cyclization of alkyne III (preparation given) in the presence of I2/K2CO3, Pd-coupling with (2,4dichlorophenyl)boronic acid, Ts-deprotection, alkylation of the pyrrole IV with MeI in the presence of K2CO3/ester hydrolysis (ester not isolated) and amidation of the acid with N-aminopiperidine. I exhibited an excellent affinity in vitro (IC50 ≤ 5•10-7 M) for the CB1 cannabinoid receptors. Thus, I are useful for treating psychosis, appetite and gastrointestinal disorders, smoking and alc. cessation, etc.
- IT 87567-50-8P, 5-(4-Chlorophenyl)-4-(2,4-dichlorophenyl)-1-methyl-N(piperidin-1-yl)-1H-pyrrole-2-carboxamide 875667-52-0P
 RL: PAC (Pharmacological activity), SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(drug candidate; preparation of pyrrole carboxamide derivs. as antagonists of CB1 cannabinoid receptors) $\,$

RN 875667-50-8 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-(4-chlorophenyl)-4-(2,4-dichlorophenyl)-1methyl-N-1-piperidinyl- (CA INDEX NAME)

RN 875667-52-0 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(2,4-dichlorophenyl)-5-(4-methoxyphenyl)-1-methyl-N-1-piperidinyl- (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:104702 CAPLUS Full-text

DOCUMENT NUMBER: 144:462886

TITLE: Co-transport of H+/Cl- by a synthetic prodigiosin minic. [Erratum to document cited in CAl43:300973]
AUTHOR(S): Gale, Philip A.; Light, Mark E.; MCNally, Beth;

Navakhun, Korakot; Sliwinski, Kate E.; Smith, Bradlev

D.

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom)

(2006), (2), 226

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

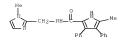
AB The structural formula for compound 2 on page 3773 was incorrect. The correct version of compound 2 is given.

IT 864943-19-1P

RL: BUU (Biological use, unclassified); PRF (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cotransport of H+/Cl- by synthetic prodigiosin mimic (Erratum))

RN 864943-19-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-methyl-N-[(1-methyl-1H-imidazol-2-yl)methyl]-3,4-diphenyl- (CA INDEX NAME)



864943-20-4P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cotransport of H+/Cl- by synthetic prodigiosin mimic (Erratum))

864943-20-4 CAPLUS RN

CN 1H-Pyrrole-2-carboxamide, 5-methyl-3,4-diphenyl-N-2-pyridinyl- (CA INDEX NAME)

L3 ANSWER 16 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:645311 CAPLUS Full-text

DOCUMENT NUMBER: 143:300973

TITLE: Co-transport of H+/Cl- by a synthetic prodigiosin mimic

AUTHOR(S):

Gale, Philip A.; Light, Mark E.; McNally, Beth; Navakhun, Korakot; Sliwinski, Kate E.; Smith, Bradley

School of Chemistry, University of Southampton, CORPORATE SOURCE: Southampton, SO17 1BJ, UK

Chemical Communications (Cambridge, United Kingdom)

(2005), (30), 3773-3775

CODEN: CHCOFS; ISSN: 1359-7345

Roval Society of Chemistry

PUBLISHER: Journal

DOCUMENT TYPE: LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:300973

An amidopyrrole with appended imidazole group can bind and co-transport H+/Clacross vesicle membranes much more effectively than an analog with an appended pyridyl group.

864943-19-1P

SOURCE:

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cotransport of H+/Cl- by synthetic prodigiosin mimic)

RN 864943-19-1 CAPLUS

1H-Pyrrole-2-carboxamide, 5-methyl-N-[(1-methyl-1H-imidazol-2-yl)methyl]-CN 3.4-diphenvl- (CA INDEX NAME)

864943-20-4P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cotransport of H+/Cl- by synthetic prodigiosin mimic)

864943-20-4 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-methyl-3,4-diphenyl-N-2-pyridinyl- (CA INDEX NAME)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:469894 CAPLUS Full-text DOCUMENT NUMBER: 143:7592

TITLE: Preparation of arylpyrrolecarboxamides as Raf kinase

inhibitors for treatment of tumors.

INVENTOR(S): Finsinger, Dirk; Buchstaller, Hans-Peter; Burgdorf, Lars; Wiesner, Matthias; Amendt, Christiane; Grell,

Matthias; Sirrenberg, Christian; Zenke, Frank

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany SOURCE:

Ger. Offen., 32 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KIND		DATE			APPLICATION NO.					D.	DATE		
	DE	1035	4060			A1		2005	0602		DE 2	003-	1035	4060		2	0031	119
	AU	AU 2004291255 CA 2546334			A1		20050602		AU 2004-291255				20041026					
	CA				A1 2005060:			0602	CA 2004-2546334					20041026				
	WO	WO 2005049603				A1 20050602			WO 2004-EP12076					20041026				
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			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
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    EP 1685125
                              20060802
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                        A1
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            IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
    CN 1882571
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                       A1
    US 20070149594
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                                                               20060517
PRIORITY APPLN. INFO.:
                                         DE 2003-10354060 A 20031119
                                         WO 2004-EP12076 W 20041026
OTHER SOURCE(S):
                      MARPAT 143:7592
GT
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AB Title compds. [I; Ar = (substituted) Ph, naphthyl, biphenyl, heterocyclyl; X = O, S, (CH2)n, CO, (CH2)nO, (CH2)nNH, etc.; n = 1-3; Y = O, S, CHNO2, C(CN)2, NR4; R4 = H, cyano, OH, etc.; Z = Ar, ArXAr, CH2Ar, CH2ArXAr; Ar = (substituted) Ph], were prepared as Raf kinase inhibitors (no data). Thus, 4-(PhCH2O)C6H4CH2CO2H, DMF, and POC13 were heated together at 70° for 4 h followed by cooling and addition of ice water and aqueous NaClO4 to give 98% [2-(4-benzyloxyphenyl)-3-dimethylaminoallylideneldimethylammonium perchlorate. This was refluxed 24 h with glycine Et ester hydrochloride in EtOH containing 20% NaOEt to give 91% Et 4-(4-benzyloxyphenyl)-1H-pyrrole-2-carboxylate. Hydrogenolysis of the latter in EtOAc over Pd/C gave 91% Et 4-(4hydroxyphenyl)-1H-pyrrole-2-carboxylate. This was heated with 4chloropyridine-2-carboxylic acid N-methylamide at 160° for 48 h to give 40% Et 4-[4-(2-methylcarbamoylpyridin-4-yloxy)phenyl]-1H-pyrrole-2- carboxylate. Saponification with 2N NaOH in EtOH at 60° for 16 h followed by acidification with HCl gave 85% free acid, which was stirred 48 h in DMF with 5-amino-2chlorobenzotrifluoride, N-(3-dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride, and 1-hydroxybenzotriazole hydrate to give 17% 4-[4-[5-(4chloro-3-trifluoromethylphenylcarbamovl)-1H-pyrrol-3- vllphenoxylpyridine-2carboxylic acid N-methylamide.

IT 1073641-55-8 1073641-54-9 1073641-55-0 1073641-55-1 1073641-55-1 1073641-58-3 1073641-55-4 1073641-66-7 1073641-61-8 1073641-62-9 1073641-63-0 1073641-61-1 RL: PREH (Prophetic)

(Preparation of arylpyrrolecarboxamides as Raf kinase inhibitors for treatment of tumors.) 1073641-53-8 CAPLUS

RN 1073641-53-8 CAPLUS
CN lH-Pyrrole-2-carboxamide, 4-[4-(methylsulfonyl)phenyl]-N-[[3-(4-pyridinyloxylphenyl]methyl]- (CA INDEX NAME)

RN 1073641-54-9 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[4-[[4-[3-(trifluoromethyl)phenyl]-1H-pyrrol-2-yl]carbonyl]amino]phenoxy]- (CA INDEX NAME)

RN 1073641-55-0 CAPLUS

CN 1H-Pyrrole-2-carboxamide, N-[4-(3-pyridinyloxy)phenyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1073641-56-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, N-[4-(4-pyridinyloxy)phenyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1073641-58-3 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[4-[[[4-[4-(methylsulfonyl)phenyl]-1H-pyrrol-2-yl]carbonyl]amino]methyl]phenoxy]- (CA INDEX NAME)

RN 1073641-59-4 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-phenoxyphenyl)-N-[4-(4-pyridinyloxy)phenyl]-(CA INDEX NAME)

RN 1073641-60-7 CAPLUS

CN 1H-Pyrrole-2-carboxamide, N-(4-chlorophenyl)-4-(4-phenoxyphenyl)- (CA INDEX NAME)

RN 1073641-61-8 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-phenoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1073641-62-9 CAPLUS

RN 1073641-63-0 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-(4-chloropheny1)-1H-pyrrol-2-y1]carbony1]amino]phenoxy]-N-methyl- (CA INDEX NAME)

RN 1073641-64-1 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-[4-(methylsulfonyl)phenyl]-N-[4-(3-pyridinyloxy)phenyl]- (CA INDEX NAME)

IT 852455-39-7P 852455-20-0P 852455-21-1P 852455-22-2P 852455-23-3P 852455-24-4P

852455-25-5P 852455-26-6P 852455-27-7P 852455-26-8P 852455-29-9P 852455-30-2P 852455-31-3P 852455-32-4P 852455-33-5P 852455-34-6P 852455-35-7P 852455-36-8P 852455-37-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

uses)
(claimed compound; preparation of arylpyrrolecarboxamides as Raf kinase inhibitors for treatment of tumors)

RN 852455-19-7 CAPLUS CN 2-Pvridinecarboxamid

2-Pyridinecarboxamide, 4-[4-[5-[[[4-chloro-3-(trifluoromethyl]phenyl]amino]carbonyl]-H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-20-0 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]-IH-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-21-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[5-[[(3-chloro-4-methylphenyl)amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-22-2 CAPLUS

CN

2-Pyridinecarboxamide, 4-[4-[5-[[[2-methoxy-5-(trifluoromethyl)phenyl]amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-23-3 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[(3-chloro-4-methylphenyl)amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-24-4 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[5-[[(5-chloro-2-methoxypheny1)amino]carbony1]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-25-5 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[(5-chloro-2-methoxypheny1)amino]carbony1]-1H-pyrrol-3-y1]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-26-6 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[[2-methoxy-5-(trifluoromethyl)phenyl]amino]carbonyl]-IH-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-27-7 CAPLUS CN 2-Pvridinecarboxamic

2-Pyridinecarboxamide, 4-[3-[5-[[(4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-28-8 CAPLUS

2-Pyridinecarboxamide, 4-[3-[5-[[[4-bromo-3-(trifluoromethyl)phenyl]amino]carbonyl]-H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-29-9 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[3-[5-[[[3-(trifluoromethoxy)phenyl]amino]carbonyl]-H-pyrrol-3-yl]phenoxy]- (CA INDEX NAME)

RN 852455-30-2 CAPLUS

N 2-Pyridinecarboxamide, 4-[3-[5-[[[4-(1,1-

dimethylethyl)phenyl]amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-31-3 CAPLUS

N 2-Pyridinecarboxamide, 4-[3-[5-[[(3,4-dichlorophenyl)amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-32-4 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[(4-chloro-2-methoxy-5-methylphenyl)amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-33-5 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[[2,4-dimethoxy-5-(trifluoromethoxy]phenyl]amino]carbonyl]-H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NNB)

RN 852455-34-6 CAPLUS

2-Pyridinecarboxamide, 4-[3-[5-[[[2-(dimethylamino)-5-(trifluoromethyl)phenyl]amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl-(CA INDEX NAME)

RN 852455-35-7 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[3-[5-[[[5-methyl-2-[2-(methylamino)ethoxy]phenyl]amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]- (CA INDEX NAME)

RN 852455-36-8 CAPLUS

2-Pyridinecarboxamide, 4-[3-[5-[[[2-[2-(dimethylamino)ethoxy]-5-methylphenyl]amino]carbonyl]-1H-pyrrol-3-yl]phenoxy]-N-methyl- (CA INDEX NAME)

RN 852455-37-9 CAPLUS

CN 2-Pyridinecarboxamide, 4-[3-[5-[[[2-[[2-(dimethylamino)ethyl]methylamino]5-methylphenyl]amino]carbonyl]-1H-pyrrol-3-yllphenoxy]-N-methyl- (CA
INDEX NAME)

L3 ANSWER 18 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:570508 CAPLUS Full-text

DOCUMENT NUMBER: 141:106366

TITLE: Preparation of substituted pyrroles as kinase

inhibitors

INVENTOR(S): Sun, Connie Li; Tang, Peng Cho; Ockey, Denise

PATENT ASSIGNEE(S): Sugen, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20040138269	A1	20040715	US 2003-679693	20031007		
PRIORITY APPLN. INFO.:			US 2002-417555P P	20021011		
OTHER COHROCKER.	MADDAT	141.106366				

GT

- AB Title compds. I [R1 = H, alkyl, aryl, heteroaryl; R2 = alkyl, cycloalkyl, aryl, etc.; R3 = H, alkyl, R4 = H, alkyl, cycloalkyl, etc.; R5 = alkyl, cycloalkyl, aryl, heteroaryl, etc.; L = linker, e.g., alkyl-carboxamido, etc.; n = 0-5; A, B = cycloalkyl, aryl, heteroaryl are prepared For instance, 3,5-dimethyl-HH-pyrrole-2-carboxylic acid Et ester is brominated in the 4-position (CH3CN, NBS, K2CO3) and coupled to 4-carboxyphenylboronic acid (DMF, (PPh3) 4Pd, K2CO3, 18 h) to give II. I modulate the activity of protein kinases (FK) and are useful in treating disorders related to abnormal PK activity.
- IT 720768-47-4P, 4-[3-(3-Trifluoromethylphenylcarbamoyl)phenyl]-1Hpyrrole-2-carboxylic acid [2-(morpholin-4-yl)ethyl]amide

729708-57-69, 4-[4-[N'-(4-Isopropylphenyl)ureido]phenyl]-1Hpyrrole-2-carboxylic Acid [2-(morpholin-4-yl)ethyl]amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (substituted pyrroles as kinase inhibitors)

RN 720708-47-4 CAPLUS

1H-Pyrrole-2-carboxamide, N-[2-(4-morpholiny1)ethy1]-4-[3-[[[3-CN (trifluoromethyl)phenyl]amino]carbonyl]phenyl]- (CA INDEX NAME)

RN 720708-57-6 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-[4-[[[[4-(1methylethyl)phenyl]amino]carbonyl]amino]phenyl]-N-[2-(4-morpholinyl)ethyl]-(CA INDEX NAME)

L3 ANSWER 19 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:292020 CAPLUS Full-text

DOCUMENT NUMBER: 140:321233

TITLE: A preparation of pyrrole derivatives useful for the treatment of disorders ameliorated by reduction of

TNF-α production and/or p38 activity

INVENTOR(S): Bullington, James L.; Fan, Xiaodong; Jackson, Paul F.;

Zhang, Yue-mei PATENT ASSIGNEE(S):

Janssen Pharmaceutica N.V., Belg. SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

Patent English

LANGUAGE: EF FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

DOCUMENT TYPE:

KIND DATE PATENT NO. APPLICATION NO. DATE -----WO 2004029040 A1 20040408 WO 2003-US30223 20030924 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2500221 A1 20040408 CA 2003-2500221 20030924 AU 2003278927 A1 20040419 AU 2003-278927 20030924 US 20050043331 A1 20050224 US 2003-670031 20030924 A1 20050706 EP 2003-770442 EP 1549635 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20050726 BR 2003-14783 BR 2003014783 A 20030924 A T 20051123 CN 2003-825319 CN 1701069 20030924 T 20060406 JP 2004-539896 A 20051018 MX 2005-PA3264 A 20050621 NO 2005-1967 JP 2006511479 20030924 MX 2005PA03264 20050328 NO 2005001967 A 20060726 A 20060630 ZA 2005003383 ZA 2005-3383 20050426 IN 2005KN00739 IN 2005-KN739 20050427 IN 2005-KN739 20050427 US 2002-414436P P 20020927 WO 2003-US30223 W 20030924 PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 140:321233 GI

- The invention relates to 3-pyridyl-4-arylpyrrole derivs, of formula I AB [wherein: R1 and R2 are independently selected from (un)substituted (hetero)aryl; R3 = H, (un)substituted alkyl, -N:CR6-, -C(0)R7, etc.; R4 = H, (un) substituted alkyl, (un) substituted (hetero) aryl, etc.; R5 = (un) substituted alkyl, C(0)OR7, C(0)R7, CN, NO2, halo, etc.; R6 and R7 are independently selected from H, (un)substituted alkyl, (un)substituted aryl, (un) substituted heterocycle; with provisos], and pharmaceutical compns. comprising the same, useful for treating disorders ameliorated by reducing ${
 m TNF-}lpha$ production and/or p38 activity in appropriate cells. The invention compds. I were screened for p38 inhibition (in-vitro enzyme assays) and TNF- α inhibition (in-vitro whole cell assays and in vivo rodent assay). The invention also provides therapeutic and prophylactic methods using the instant pharmaceutical compns. For instance, pyrrole derivative II (compound 5; mouse 10 mg/kg, 0.5 h, 44% inhibition of TNF- α production) was prepared via condensation of 4-fluorobenzaldehyde with 4-pyridylacetonitrile, heterocyclization of the obtained pyridine derivative III with Me isocyanoacetate, N-methylation of the pyrrole ring of the obtained pyrrolecarboxylate derivative IV (X = H, R = H), bromination of the pyrrolecarboxylate derivative IV (X = H, R = Me), and subsequent amination of the obtained bromopyrrole derivative IV (X = Br, R = Me) by 4-(2aminoethyl) morpholine.
- IT 678161-63-2P 678161-84-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridyl(aryl)pyrrole derivs. useful for the treatment of disorders ameliorated by reduction of TNF- α production and/or p38 activity)

- RN 678161-63-2 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, N-ethyl-4-(4-fluorophenyl)-3-(4-pyridinyl)- (CA INDEX NAME)

- RN 678161-84-7 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, 4-(4-fluorophenyl)-N-(phenylmethyl)-3-(4pyridinyl)- (CA INDEX NAME)

L3 ANSWER 20 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:290714 CAPLUS Full-text

DOCUMENT NUMBER: 139:133415

TITLE: Nitrophenyl derivatives of pyrrole 2,5-diamides:

structural behavior, anion binding and color change signaled deprotonation

AUTHOR(S): Camiolo, Salvatore; Gale, Philip A.; Hursthouse,

Michael B.; Light, Mark E.

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Organic & Biomolecular Chemistry (2003), 1(4), 741-744

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:133415

GI

$$\stackrel{\mathbb{R}^2}{\underset{\mathbb{R}^2}{\longrightarrow}} \stackrel{\mathbb{N}H}{\underset{\mathbb{P}h}{\longrightarrow}} \stackrel{\mathbb{H}}{\underset{\mathbb{P}h}{\longrightarrow}} \stackrel{\mathbb{R}^2}{\underset{\mathbb{R}^2}{\longrightarrow}} \mathbb{R}^1$$

- AB Two new pyrrole 2,5-diamide clefts (I; R1 = NO2, R2 = H; R1 = H, R2 = NO2) have been synthesized. The 3,5-dinitrophenyl derivative has been shown to deprotonate in the presence of fluoride, which in acetonitrile solution, gives rise to a deep blue color.
- IT 566932-84-1P 566932-86-3P 566932-87-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and x-ray anal. of)
 RN 566932-84-1 CAPLUS
- CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(4-nitropheny1)-3,4-dipheny1- (CA INDEX NAME)

RN 566932-86-3 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N,N'-bis(4-nitrophenyl)-3,4-diphenyl-, compd. with sulfinylbis[methane] (1:3) (9CI) (CA INDEX NAME)

CM

CRN 566932-84-1 CMF C30 H21 N5 O6

CM 2

CRN 67-68-5

CMF C2 H6 O S

RN 566932-87-4 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N,N'-bis(3,5-dinitrophenyl)-3,4-diphenyl-, compd. with sulfinylbis[methane] (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 566932-85-2

CMF C30 H19 N7 O10

$$\begin{array}{c} \text{NO2} \\ \text{O2N} \end{array} \\ \text{HH} \\ \begin{array}{c} \text{O} \\ \text{PH} \end{array} \\ \begin{array}{c} \text{Ph} \\ \text{Ph} \end{array} \\ \text{NO2} \\ \text{NO2} \\ \text{NO2} \\ \text{NO2} \\ \text{NO3} \\ \text{NO4} \\ \text{NO5} \\ \text{NO5} \\ \text{NO6} \\ \text{NO7} \\ \text{NO7} \\ \text{NO9} \\ \text{NO$$

CM 2

CRN 67-68-5 CMF C2 H6 O S

нас**_**______Сна

IT 566932-85-2P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, x-ray anal., and chloride binding of)

RN 566932-85-2 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(3,5-dinitrophenyl)-3,4-diphenyl-(CA INDEX NAME)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:276159 CAPLUS Full-text

DOCUMENT NUMBER: 139:350593

TITLE: Crown Ether Appended Amidopyrrole Clefts

AUTHOR(S): Camiolo, Salvatore; Coles, Simon J.; Gale, Philip A.; Hursthouse, Michael B.; Tizzard, Graham J.

CORPORATE SOURCE: Department of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Supramolecular Chemistry (2003), 15(3), 231-234

CODEN: SCHEER; ISSN: 1061-0278

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:350593

AB Two new pyrrole amide-crown ether conjugates have been synthesized and their anion complexation properties studied in the absence and presence of stoichiometric quantities of sodium or cesium cations. Certain anions are sequestered by the metal cation in DMSO-d6 (0.5% water), however, in one case a 4.7 fold increase in the fluoride affinity of the receptor was observed upon addition of caesium cations. Crystal structure of one of the products was also reported.

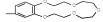
IT 619328-75-5P

- RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; preparation and crystal structure of crown ether-appended amidopyrrole clefts and their anion complexation in presence of sodium or cesium cations)
- RN 619328-75-5 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, 5-methyl-N-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-3,4-diphenyl- (CA INDEX NAME)

- IT 619328-75-5DP, halide, benzoate, and phosphate complexes 619328-76-6DP, halide, benzoate, and phosphate complexes
 - 619328-76-6P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of crown ether-appended amidopyrrole clefts and their anion complexation in presence of sodium or cesium cations)
- RN 619328-75-5 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, 5-methyl-N-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-3,4-diphenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

- RN 619328-76-6 CAPLUS
- CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-3,4-diphenyl- (CA INDEX NAME)



RN 619328-76-6 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-15-yl)-3,4-diphenyl- (CA INDEX NAME)

PAGE 1-B

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:126247 CAPLUS Full-text

DOCUMENT NUMBER: 139:133642

TITLE: Mono- and bis-ferrocene 2,5-diamidopyrrole clefts:

solid-state assembly, anion binding and

electrochemical properties

AUTHOR(S): Coles, Simon J.; Denuault, Guy; Gale, Philip A.;

Horton, Peter N.; Hursthouse, Michael B.; Light, Mark

E.; Warriner, Colin N.

CORPORATE SOURCE: School of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Polyhedron (2003), 22(5), 699-709 CODEN: PLYHDE; ISSN: 0277-5387

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:133642

CT

- AB Four amido-pyrrole cleft anion receptors bearing one or two ferrocene reporter groups, e.g., I [R = R' = CH2Fc 1, Fc 2, R = Ph, R' = CH2Fc 3, Fc 4, Fc = (C5H5)2Fe] were synthesized and crystallog, characterized. The receptors contain either a nonconjugated (1 and 3) or conjugated (2 and 4) link between the anion binding amido-pyrrole unit and the ferrocene reporter groups. The anion binding affinities and electrochem. behavior of the receptors in the absence and presence of anions were studied by IN NNR titration techniques and cyclic voltammetry using a Pt microdisc working electrode, resp.
 - RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(crystal structure, electrochem.; solid-state assembly, anion binding affinities and electrochem. properties of mono- and bis-ferrocene diamidopyrrole clefts)

- RN 475148-10-8 CAPLUS
- CN Ferrocene, 1,1''-[(3,4-diphenyl-1H-pyrrole-2,5-diyl)bis(carbonyliminomethylene)]bis-(9CI) (CA INDEX NAME)

- IT 566915-30-8P
 - RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (crystal structure; preparation and amidation with aniline in the synthesis of mono- and bis-ferrocene diamidopyrrole clefts as electrochem. anion receptors)
- RN 566915-30-8 CAPLUS
- CN Ferrocene, [[(5-carboxy-3,4-diphenyl-1H-pyrrol-2-yl)carbonyl]amino]-, compd. with trichloromethane (1:1) (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 566915-29-5
 - CMF C28 H22 Fe N2 O3
 - CCI CCS

CM 2

CRN 67-66-3 CMF C H C13

C1_C1

IT 566915-24-0P 566915-25-1P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(crystal structure; preparation and saponification in the synthesis of mono-

bis-ferrocene diamidopyrrole clefts as electrochem. anion receptors) N 566915-24-0 CAPLUS

RN 566915-24-0 CAPLU CN Ferrocene, [[[[5-(

N Ferrocene, [[[[5-(methoxycarbonyl)-3,4-diphenyl-1H-pyrrol-2yl]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & & \\ & & \\ & & \\ \hline \\ H & \\ \hline \\ H & \\ \hline \\ H & \\ \end{array} \begin{array}{c} C \\ \\ \\ \\ \end{array} \begin{array}{c} C \\ \\$$

RN 566915-25-1 CAPLUS

 ${\tt CN \qquad Ferrocene, \ [[[5-(methoxycarbonyl)-3, 4-diphenyl-1H-pyrrol-2-4] }$

IT 475148-12-0P 566915-20-6P 566915-22-8P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PRCC (Process)

(crystal structure; solid-state assembly, anion binding affinities and electrochem. properties of mono- and bis-ferrocene diamidopyrrole clefts)

- RN 475148-12-0 CAPLUS
- CN Ferrocene, 1,1''-[(3,4-diphenyl-1H-pyrrole-2,5-diyl)bis(carbonylimino)]bis-(9CI) (CA INDEX NAME)

- RN 566915-20-6 CAPLUS
- CN Ferrocene, [[[[3,4-diphenyl-5-[(phenylamino)carbonyl]-1H-pyrrol-2yl]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

RN 566915-22-8 CAPLUS

CN Ferrocene, [[[3,4-diphenyl-5-[(phenylamino)carbonyl]-1H-pyrrol-2-yl]carbonyl]amino]-, compd. with methanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 566915-21-7

CMF C34 H27 Fe N3 O2

CCI CCS

CM 2

CRN 67-56-1 CMF C H4 O

нзс—он

IT 566915-29-5P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(mol. structure; preparation and amidation with aniline in the synthesis of mono- and bis-ferrocene diamidopyrrole clefts as electrochem. anion

receptors)

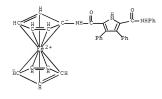
- RN 566915-29-5 CAPLUS
- CN Ferrocene, [[(5-carboxy-3,4-diphenyl-1H-pyrrol-2-y1)carbonyl]amino]- (9CI)
 (CA INDEX NAME)

IT 566915-21-7P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(mol. structure; solid-state assembly, anion binding affinities and electrochem. properties of mono- and bis-ferrocene diamidopyrrole clefts)

- RN 566915-21-7 CAPLUS
- CN Ferrocene, [[[3,4-diphenyl-5-[(phenylamino)carbonyl]-1H-pyrrol-2yl]carbonyl]amino]- (9CI) (CA INDEX NAME)

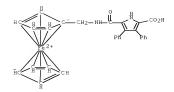


IT 566915-26-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and amidation with aniline in the synthesis of mono- and bis-ferrocene diamidopyrrole clefts as electrochem. anion receptors)

- RN 566915-26-2 CAPLUS
- CN Ferrocene, [[[(5-carboxy-3,4-diphenyl-1H-pyrrol-2yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 23 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:689617 CAPLUS Full-text

DOCUMENT NUMBER: 138:62059

TITLE: Pendant arm pyrrolic amide cleft anion receptors AUTHOR(S): Navakhun, Korakot; Gale, Philip A.; Camiolo, Salvatore; Light, Mark E.; Hursthouse, Michael B.

CORPORATE SOURCE: Department of Chemistry, University of Southampton, Southampton, SO17 1BJ, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom)

(2002), (18), 2084-2085 CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

The propensity of amine, ammonium and amide pendant arm 2.5-diamidopyrrole derivs, to act as anion receptors has been investigated. The anioncoordination ability of these species has been determined by 1H NMR titration techniques revealing a marked selectivity of the amine functionalized receptor

for hydrogen sulfate anions. 479401-36-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (X-ray structure of pendant arm pyrrolic amide cleft receptors)

RN 479401-36-0 CAPLUS

CN Phosphate (1-), hexafluoro-, hydrogen, compd. with N,N'-bis(2-aminoethyl)-3,4-diphenyl-1H-pyrrole-2,5-dicarboxamide (1:1), dihydrate (9CI) (CA INDEX NAME)

CM 1

CRN 479401-33-7 CMF C22 H25 N5 O2

$${}^{\rm H2N-CH2-CH2-NH-} \stackrel{\circ}{\mathbb{L}} \stackrel{\circ}{\longrightarrow} \stackrel{\circ}{\mathbb{L}} {}^{\rm NH-CH2-CH2-NH2}$$

CRN 16940-81-1 CMF F6 P . H CCI CCS

CM 2

● H+

IT 479401-34-3P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(pendant arm pyrrolic amide cleft anion receptors)

RN 479401-34-8 CAPLUS

CN Phosphate(1-), hexafluoro-, hydrogen, compd. with N,N'-bis(2-aminoethyl)-3, d-diphenyl-1H-pyrrole-2,5-dicarboxamide (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 479401-33-7 CMF C22 H25 N5 O2

CM 2

CRN 16940-81-1 CMF F6 P . H

CCI CCS

⊕ H+

IT 479401-33-7P 479401-35-9P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(pendant arm pyrrolic amide cleft anion receptors)

RN 479401-33-7 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis(2-aminoethy1)-3,4-dipheny1- (CA INDEX NAME)

RN 479401-35-9 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-bis[2-(acetylamino)ethyl]-3,4-diphenyl-(CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 24 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:675089 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 138:122276

TITLE: Confirmation of a cleft-mode' of binding in a

2,5-diamidopyrrole anion receptor in the solid state
AUTHOR(S): Camiolo, Salvatore; Gale, Philip A.; Hursthouse,

Michael B.; Light, Mark E.

CORPORATE SOURCE: University of Southampton, Department of Chemistry, Southampton, S017 1BJ, UK

SOURCE: Tetrahedron Letters (2002), 43(39), 6995-6996

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The crystal structure of the tetrabutylammonium benzoate complex of 3,4diphenyl-1H-pyrrole-2,5-dicarboxylic acid bis-butylamide has been elucidated confirming the formation of a cleft conformation in the solid state upon anion

binding. 488787-58-2

RL: PRP (Properties)

(crystal structure; crystal structure of tetrabutylammonium benzoate complex of diphenylpyrroledicarboxylic acid bis-butylamide)

RN 488787-58-2 CAPLUS CN 1-Butanaminium, N.N.

1-Butanaminium, N,N,N-tributyl-, benzoate, compd. with N,N'-dibutyl-3,4-diphenyl-1H-pyrrole-2,5-dicarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 365214-49-9 CMF C26 H31 N3 O2

CM 2

CRN 18819-89-1

CMF C16 H36 N . C7 H5 O2

CM 3

CRN 10549-76-5

CMF C16 H36 N

CM 4

CRN 766-76-7 CMF C7 H5 O2



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 25 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:477989 CAPLUS Full-text

DOCUMENT NUMBER: 137:370181

TITLE: Anion complexation and electrochemical behavior of ferrocene-appended amido-pyrrole clefts

AUTHOR(S): Denuault, Guy; Gale, Philip A.; Hursthouse, Michael B.; Light, Mark E.; Warriner, Colin N.

CORPORATE SOURCE: Department of Chemistry, University of Southampton, Southampton, S017 1BJ, UK

SOURCE: New Journal of Chemistry (2002), 26(7), 811-813 CODEN: NJCHE5; ISSN: 1144-0546

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:370181

GI

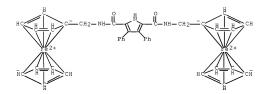
- AB Two amido-pyrrole cleft anion receptors bearing two ferrocene reporter groups, e.g., I and II [Fc = (C5H4)Fe(C5H5)] were synthesized and crystallog. characterized; the receptors contain either a nonconjugated or conjugated link between the anion-binding amido-pyrrole unit and the ferrocene reporter groups. The anion binding affinities and electrochem, behavior of the receptors in the absence and presence of anions were studied by IH NMR titration techniques and cyclic voltammetry using a Pt microdisc working electrode, resp.
- IT 475148-10-8P 475148-12-9P
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical

process); PRP (Properties); SPN (Synthetic preparation); PREP
(Preparation); PROC (Process)

(preparation, electrochem. and crystal structure of)

RN 475148-10-8 CAPLUS

CN Ferrocene, 1,1"-[(3,4-diphenyl-1H-pyrrole-2,5-diyl)bis(carbonyliminomethylene)]bis-(9CI) (CA INDEX NAME)



RN 475148-12-0 CAPLUS

CN Ferrocene, 1,1''-[(3,4-diphenyl-1H-pyrrole-2,5-diyl)bis(carbonylimino)]bis-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 26 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:219745 CAPLUS Full-text

25

DOCUMENT NUMBER: 137:109012

TITLE: Solution and solid-state studies of

3,4-dichloro-2,5-diamidopyrroles: formation of an unusual anionic narcissistic dimer

AUTHOR(S): Camiolo, Salvatore; Gale, Philip A.; Hursthouse, Michael B.; Light, Mark E.; Shi, Andy J.

CORPORATE SOURCE: Department of Chemistry, University of Southampton,

Southampton, S017 1BJ, UK
SOURCE: Chemical Communications (C

Chemical Communications (Cambridge, United Kingdom) (2002), (7), 758-759

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:109012

AB 3,4-Dichoro-IH-pyrrole-2,5-dicarboxylic acid bis-phenylamide 3 and 3,4dichloro-IH-pyrrole-2,5-dicarboxylic acid bis-butylamide 4 were prepared and shown to deprotonate in the presence of basic anions: the x-ray crystal structure of the tetrabutylammonium salt of 3-H+ reveals the formation of a dimer in the solid state.

IT 365214-49-9

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent) (chloride receptor; solution and solid-state studies of unusual anionic narcissistic dimer of 3,4-dichloro-2,5-diamidopyrroles)

RN 365214-49-9 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-dibuty1-3,4-dipheny1- (CA INDEX NAME)

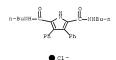
IT 443785-00-0

RL: FMU (Formation, unclassified); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)

(solution and solid-state studies of unusual anionic narcissistic dimer of 3,4-dichloro-2,5-diamidopyrroles)

RN 443785-00-0 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-dibutyl-3,4-diphenyl-, chloride (1:1) (CA INDEX NAME)



REFERENCE COUNT:

38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 27 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:759709 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:37467

TITLE: 2-Amidopyrroles and 2,5-Diamidopyrroles as Simple

Anion Binding Agents
AUTHOR(S): Gale, Philip A.; Cam

Gale, Philip A.; Camiolo, Salvatore; Tizzard, Graham
J.; Chapman, Christopher P.; Light, Mark E.; Coles,

Simon J.; Hursthouse, Michael B.

CORPORATE SOURCE: Department of Chemistry, University of Southampton,

Southampton, SO17 1BJ, UK

SOURCE: Journal of Organic Chemistry (2001), 66(23), 7849-7853

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:37467

AB Four new 2-pyrrolecarboxamides and 2,5-pyrroledicarboxamides have been synthesized and their anion complexation properties investigated. The crystal structures of these receptors have been elucidated and reveal hydrogen bonding in the solid state leading to dimer and network formation. Selectivity for oxo-anions has been demonstrated by IH NMR titration techniques; the 2,5-pyrroledicarboxamides are particularly selective for dihydrogen phosphate and benzoate over halide anions.

IT 380537-10-0 380537-11-1

RL: PRP (Properties)

(crystal structure; preparation, crystal structures, and anion complexation properties of pyrrolecarboxamides and pyrroledicarboxamides)

RN 380537-10-0 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-methyl-N,3,4-triphenyl-, compd. with

dichloromethane (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 380537-09-7 CMF C24 H20 N2 O

CM 2

CRN 75-09-2 CMF C H2 C12

C1-CH2-C1

RN 380537-11-1 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N,N',3,4-tetraphenyl-, compd. with sulfinylbis[methane] (1:1) (9CI) (CA INDEX NAME)

CM

CRN 365214-50-2 CMF C30 H23 N3 O2

CM 2

CRN 67-68-5 CMF C2 H6 O S

IT 365214-49-9P 365214-50-2P 380537-08-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; preparation, crystal structures, and anion complexation properties of pyrrolecarboxamides and pyrroledicarboxamides)

RN 365214-49-9 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-dibutyl-3,4-diphenyl- (CA INDEX NAME)

$$n-BuNH = \bigcup_{Ph}^{O} \bigcup_{Ph}^{H} \bigcup_{Ph}^{O} NHBu-n$$

RN 365214-50-2 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5,3,4-tetraphenyl- (CA INDEX NAME)

RN 380537-08-6 CAPLUS

CN 1H-Pyrrole-2-carboxamide, N-butyl-5-methyl-3,4-diphenyl- (CA INDEX NAME)



IT 380537-09-7P

RL: SPM (Synthetic preparation); PREP (Preparation) (preparation, crystal structures, and anion complexation properties of pyrrolecarboxamides and pyrroledicarboxamides)

RN 380537-09-7 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-methyl-N,3,4-triphenyl- (CA INDEX NAME)



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 28 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:498916 CAPLUS Full-text

DOCUMENT NUMBER: 135:288487

TITLE: Hydrogen-bonding pyrrolic amide cleft anion receptors AUTHOR(S): Gale, P. A.; Camiolo, S.; Chapman, C. P.; Light, M. E.; Hursthouse, M. B.

CORPORATE SOURCE: Department of Chemistry, University of Southampton,

Southampton, S017 1BJ, UK
SOURCE: Tetrahedron Letters (2001), 42(30), 5095-5097

CODEN: TELEAY: ISSN: 0040-4039

CODEN: TELEAT; ISSN: 0040-4035

PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:288487

The use of simple 2,5-diamidopyrrole derivs. as anion receptors has been investigated. Reaction of 3,4-diphenylpyrrole-2,5-dicarboxylic acid chloride with n-butylamine or aniline has produced two new amidic cleft anion receptors 1 and 2. The anion-coordination ability of these species has been determined by 1H NNR titration techniques. Crystal structures of 1 and 2 have been elucidated, revealing a continuous hydrogen bonding network formed by 1 and dimerization of 2 via NH-vO and CH-vO hydrogen bonds.

IT 365214-49-9 365214-50-2

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(anion receptor; hydrogen-bonding pyrrolic amide cleft anion receptors)
RN 365214-49-9 CAPLUS

KN 363214-49-9 CAPLOS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5-dibutyl-3,4-diphenyl- (CA INDEX NAME)

$$_{\text{N-BuNH}} = \underbrace{\overset{\circ}{\text{H}}}_{\text{Ph}} \underbrace{\overset{\circ}{\text{H}}}_{\text{Ph}} = \underbrace{\overset{\circ}{\text{N+Bu-r}}}_{\text{NHBu-r}}$$

RN 365214-50-2 CAPLUS

CN 1H-Pyrrole-2,5-dicarboxamide, N2,N5,3,4-tetraphenyl- (CA INDEX NAME)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 29 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:115 CAPLUS Full-text

DOCUMENT NUMBER:

128:84047

SOURCE:

ORIGINAL REFERENCE NO.: 128:16249a,16252a

TITLE:

Synthesis, Anticonvulsant Activity, and

Structure-Activity Relationships of Sodium Channel Blocking 3-Aminopyrroles

AUTHOR(S): Unverferth, Klaus; Engel, Juergen; Hoefgen, Norbert;

> Rostock, Angelika; Guenther, Ralf; Lankau, Hans-Joachim; Menzer, Manfred; Rolfs, Andreas;

Liebscher, Juergen; Mueller, Birgit; Hofmann,

Hans-Joerg

CORPORATE SOURCE: Corporate Research and Development ASTA Medica Group,

Arzneimittelwerk Dresden GmbH, Radebeul, D-01445, Germany

Journal of Medicinal Chemistry (1998), 41(1), 63-73

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English GI

- AB Starting from the corresponding acetophenone and glycine derivs., a series of new 3-aminopyrroles I [R1 = H, Me, PhCH2, Ac, PrCO, Bz, PhO2C, 4morpholinylcarbonyl, EtSO2; R2 = CO2Me, CO2Et, CN, CO2CH2CHMe2, CO2H, H, CONH2, CONHPr, CONHCH2CH:CH2, CONHCH2CH2CMe, CONMe2, 4-morpholinylcarbonyl, 1-(4-methylpiperazinyl)carbonyl, COMe, CH2CH2CO2Me; R3 = 4-morpholinyl, NEt2, NMe2, 4-phenyl-1-piperazinyl, 4-methyl-1-piperazinyl, NMeCH2CH2NMe2; R4 = 4-Cl, 4-Br, 3-Br, 2-Me, H, 4-F, 4-Et] was synthesized in few steps. Using this procedure with hydrazine and hydroxylamine instead of the glycinates provides access to 3-aminopyrazole II and 5-amino-1,2-oxazole III. The various derivs. were tested for anticonvulsant activity in a variety of test models. Several compds. exhibit considerable activity with a remarkable lack of neurotoxicity. Ester I (R1 = H, R2 = CO2Me, R3 = 4-morpholinyl, R4 = 4-Br) (IV) was the most active compound IV was protective in the maximal electroshock seizure (MES) test in rats with an oral ED50 of 2.5 mg/kg with no neurotoxicity noted at doses up to 500 mg/kg. IV blocks sodium channels in a frequency-dependent manner. The essential structural features which could be responsible for an interaction with an active site of the voltage-dependent sodium channel are established within a suggested pharmacophore model.
 - 183591-88-0P 200862-96-0P 200862-97-1P 200862-98-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, anticonvulsant activity, and structure-activity relationships of sodium channel blocking aminopyrroles)

- RN 183591-88-0 CAPLUS
- CN 1H-Pvrrole-2-carboxamide, 4-(4-chlorophenv1)-3-(4-morpholinv1)- (CA INDEX NAME)

- 200862-96-0 CAPLUS RN
- CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-3-(4-morpholinyl)-N-propyl-(CA INDEX NAME)

1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-3-(4-morpholinyl)-N-2-propen-CN 1-y1- (CA INDEX NAME)

RN 200862-98-2 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-N-(2-methoxyethyl)-3-(4morpholinvl)- (CA INDEX NAME)

THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 57 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 30 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:120169 CAPLUS Full-text

DOCUMENT NUMBER: 126:199420 ORIGINAL REFERENCE NO.: 126:38551a,38554a

TITLE: Mechanistic aspects of the synthesis of

3-aminopyrroles from substituted 2-methyl-1,2-thiazolium salts or

3-aminothioacrylamides. [Erratum to document cited in

CA126:79361

AUTHOR(S): Rolfs, Andreas; Jones, Peter G.; Liebscher, Juergen CORPORATE SOURCE: Inst. Chemie, Humboldt-Univ., Berlin, D-10115, Germany SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1997), (2), 183

CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In Scheme 2, the structure for compound 6 is corrected. The error was not reflected in the abstract or the index entries.

183591-88-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of pyrroles by ring transformation and desulfurization of thiazolium compds. (Erratum))

RN 183591-88-0 CAPLUS

CM 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-3-(4-morpholinyl)- (CA INDEX

ANSWER 31 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN 1996:635701 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 126:7936

ORIGINAL REFERENCE NO.: 126:1767a,1770a

TITLE: Mechanistic aspects of the synthesis of

3-aminopyrroles from substituted 2-methyl-1,2-thiazolium salts or

3-aminothioacrylamides AUTHOR(S):

Rolfs, Andreas; Jones, Peter G.; Liebscher, Juergen CORPORATE SOURCE: Inst. Chemie, Humboldt-Univ., Berlin, D-10115, Germany

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (19),

2339-2343

CODEN: JCPRB4; ISSN: 0300-922X PUBLISHER:

Royal Society of Chemistry DOCUMENT TYPE: Journal

LANGUAGE: English

CASREACT 126:7936 OTHER SOURCE(S):

AB

was investigated. The thiazolium salts I (R1 = 4-nitrophenyl, amido) were transformed into the thioamide derivs. II (same R1). II were subsequently transformed into the pyrroles III (R = cyano, amido).

TT 183591-88-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of pyrroles by ring transformation and desulfurization of thiazolium compds.)

183591-88-0 CAPLUS RN

CN 1H-Pyrrole-2-carboxamide, 4-(4-chlorophenyl)-3-(4-morpholinyl)- (CA INDEX NAME)

L3 ANSWER 32 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:994741 CAPLUS Full-text 124:86809

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 124:16315a,16318a

TITLE:

Preparation of (pyrrolyl- and

thienylcarbonyl)guanidines as sodium-hydrogen exchange

inhibitors, antiarrhythmic agents, and cell

proliferation inhibitors

INVENTOR(S): Kleemann, Heinz-Werner; Lang, Hans-Jochen; Schwark, Jan-Robert; Weichert, Andreas; Scholz, Wolfgang;

Albus, Udo

PATENT ASSIGNEE(S): Hoechst A.-G., Germany SOURCE:

Eur. Pat. Appl., 48 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT NO.		KIN	D DATE	APPLICATION NO.	DATE
	676395 676395		A2 A3		EP 1995-105088	19950405
	676395		B1	20030903	OD OD TE TE TT	D
	R: AT, 4412334	BE,	A1	19951019		19940411
	248817 2206471		T T3	20030915 20040516		19950405 19950405
	9501681 9516354		A A	19951012 19951019		19950407 19950407
AU	683722 5698581		B2 A			19950407
CA	2146707		A1	19951012		19950410
	2146707 9501405		C A	20081021 19951012	NO 1995-1405	19950410

JP 07291927	A	19951107	JP	1995-107811		19950410
JP 4171078	B2	20081022				
ZA 9502930	A	19960126	ZA	1995-2930		19950410
HU 71616	A2	19960129	HU	1995-1035		19950410
CN 1117044	A	19960221	CN	1995-104391		19950410
CN 1073988	C	20011031				
IL 113310	A	20000629	IL	1995-113310		19950410
PRIORITY APPLN. INFO.:			DE	1994-4412334	A	19940411
OTHER SOURCE(S):	MARPAT	124:86809				
GI						

- AB Title compds. [I; 1 of R1,R2 = CON:C(NH2)2 and the other = H, halo, alkyl, CON:C(NH2)2, NH2, etc.; R3,R4 = H, halo, cyano, alkyl, Ph, heteroaryl, etc.; Z = SOO-2, O, NR5; R5 = H, alkyl, etc.] were prepared Thus, Me 1-methylpyrrole-2-carboxylate was alkylated with (CF3)2CFI and the product amidated with quanidine to give I [R1 = CON:C(NH2)2, R2 = R3 = H, R4 = (CF3)2CF, Z = NMe] which ad IC50 of 0.3µM against Na+/H+ exchange in rabbit erythrocytes in vitro.
- IT 172460-15-0P 172460-16-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (pyrrolyl- and thienylcarbonyl)guanidines as sodium-hydrogen exchange inhibitors, antiarrhythmic agents, and cell proliferation inhibitors)

- RN 172460-15-0 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, N-(aminoiminomethy1)-4-pheny1-3-(trifluoromethy1)- (CA INDEX NAME)

- RN 172460-16-1 CAPLUS
- CN 1H-Pyrrole-2-carboxamide, N-(aminoiminomethyl)-1-methyl-4-phenyl-3-(trifluoromethyl)- (CA INDEX NAME)



L3 ANSWER 33 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:218959 CAPLUS Full-text

DOCUMENT NUMBER: 122:133846

ORIGINAL REFERENCE NO.: 122:24979a,24982a

TITLE: Preparation of small peptide anaphylatoxin receptor

ligands

INVENTOR(S): Or, Yat Sun; Luly, Jay R.
PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

AB

PATENT NO. KIND DATE APPLICATION NO. DATE

W: 09407815 A2 19940414 W0 1993-US8173 19930830
W: CA, JP
RN: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
RITY APPLN INFO: US 1992-951684 A 19920925

PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 122:133846

SOURCE(S): MARPAT 122:133846
Cligopeptide compds. or analogs represented by the formula A-B-D [A = R1-R2; B = R3-R4-R5; D = R6-R7-R8; R1 = H, alkyl, cycloalkyl, cycloalkylalkyl, aryl,

arylalkyl, arylalkenyl, arylhydrazino, arylalkylamino, aminoalkyl, heterocyclyl, heterocyclylalkyl; R2 = CO, CS, CH2, SO2; provided that when R2 is CS or SO2, R1 may be H; R3, R6 = NR101 (wherein R101 = H, alkyl, arylalkyl); R4 = CR200R201, NR101, (E)- or (Z)-C:CHR205 (wherein R205 = arylalkyl); R5 = C0, CH2, CH2C0; R7 = CR210R211; R8 = H, CH2C02H, C02R100 (R100 = H, alkyl, arylalkyl); R200, R210 = H, alkyl, arylalkyl; R201 = (CH2)3Z (wherein Z = aryl or heterocyclyl attached to (CH2)3 through the ring C atom), CH2XCH2Z (wherein X = 0, S, NH, alkylimino; Z = Z = aryl or heterocyclyl attached to CH2XCH2 through the ring C atom), CH2SCHR300W (wherein W = aryl; R300 = CO2H, alkoxycarbonyl, alkyl), CH2CH2XW (X, W = same as above), etc.; R211 = quanidinoalkyl; or R1R2 = H, alkyl, arylalkyl, aminoalkyl, quanidinoalkyl, provided that R1R2 is a group other than arylalkyl, R101 = arylalkyl; R1-R2-R3 = Q (wherein R' = H, alkyl); R1-R2-R3-R4 = arylalkylamino, heterocyclyl, arylalkyl, NHR50NR51 (wherein R50 = aroyl; R51 = aryl, arylalkyl)] are prepared These oligopeptides are ligands for the anaphylatoxin receptor and are useful for modulating C5a anaphylatoxin activity and in the treatment of inflammatory disease states. Thus, R-Arg(Tos)-Merrifield resin (I; R = Boc) was deprotected with 45% CF3CO2H in CH2C12 containing anisole and coupled with N-tert-butoxylcarbonyl-(R)-2-amino-5-phenylpentanoic acid by using diisopropylcarbodiimide in CH2C12 and DMF to give I [R = (R)-2-amino-5-phenylpentanoyl] which was treated with HF(1) and anisole at 0° for 60 min to give N-[(R)-2-amino-5-phenylpentanoyl]-L-arginine. N-[(R)-2-(2-indolecarbonylamino)-5-phenylpentanoyl]-L-arginine inhibited the binding of 125I-labeled C5a anaphylatoxin to purified PMNL membrane fragments with Ki of 0.56 µM.

IT 159320-93-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anaphylatoxin receptor ligand and antiinflammatory agent)

159320-93-1 CAPLUS RN

CN L-Arginine, N2-[5-phenyl-N-[(4-phenyl-1H-pyrrol-2-yl)carbonyl]-D-norvalyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 34 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1992:511467 CAPLUS Full-text

DOCUMENT NUMBER:

117:111467 ORIGINAL REFERENCE NO.: 117:19447a,19450a

TITLE:

Preparation of 3-aminopyrroles as analgesics and anticonvulsants

INVENTOR(S):

Liebscher, Juergen; Knoll, A.; Ushmaev, A.; Rolfs, Andreas; Lohmann, Dieter; Faust, Gottfried;

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

Morgenstern, Eveline; Scharfenberg, Peter Arzneimittelwerk Dresden G.m.b.H., Germany

SOURCE:

Ger. (East), 6 pp. CODEN: GEXXA8 Patent.

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DD 1989-338226 DD 298915 A5 19920319 19891117 PRIORITY APPLN. INFO.: DD 1989-338226 19891117 MARPAT 117:111467 OTHER SOURCE(S):

AB Title compds. [I; R = NR3R4; R1 = H, (cyclo)alkyl, arylalkyl, (hetero)aryl, CONH2, etc.; R2 = H, CHO, alkoxycarbonyl, CONH2, (hetero)aryl, cyano, NO2,

etc.; R3, R4 = H, (cyclo)alkyl, aralkyl, (hetero)aryl; NR3R4 = heterocyclyl; R5 = (hetero)aryl; R6 = H, alkyl, aryl, halo; R5R6 = alkylene] were prepared Thus, MeO2CCH2NHCH:CPhC(SMe):N+Me2 I- was cyclized to give title compound II which had ED50 of 4.5 + 10-5 mol/kg orally against maximal electroshockinduced convulsions in mice.

135548-47-98

RN

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as analgesic and anticonvulsant)

135548-47-9 CAPLUS

1H-Pvrrole-2-carboxamide, 3-(4-morpholinv1)-N,4-diphenv1- (CA INDEX NAME) CN



L3 ANSWER 35 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1992:490133 CAPLUS Full-text

DOCUMENT NUMBER:

117:90133 ORIGINAL REFERENCE NO.: 117:15733a,15736a anticonvulsants

TITLE:

Preparation aminopyrroles as analgesics and

INVENTOR(S):

Liebscher, Juergen; Knoll, A.; Ushmaev, A.; Rolfs, Andreas; Lohmann, Dieter; Faust, Gottfried;

PATENT ASSIGNEE(S):

Morgenstern, Eveline; Scharfenberg, Peter Arzneimittelwerk Dresden G.m.b.H., Germany

SOURCE:

Ger. (East), 7 pp. CODEN: GEXXA8

DOCUMENT TYPE:

AB

Patent German

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
DD 298914	A5	19920319	DD 1989-338219	19891117	
PRIORITY APPLN. INFO.:			DD 1989-338219	19891117	
OTHER SOURCE(S):	MARPAT	117:90133			

The compds. [I; R = NR3R4; R1 = H, (cyclo)alkyl, aralkyl, (hetero)aryl, CONH2, etc.; R2 = H, CHO, alkoxycarbonyl, CONH2, (hetero)aryl, cyano, NO2, etc.; R3,

R4 = H, (cyclo)alkyl, aralkyl, (hetero)aryl; or NR3R4 = heterocyclyl; R5 = (hetero)aryl; R6 = H, alkyl, aryl, halo; or R5R6 = alkylene] were prepared Thus Me2NCH: CHCSNMe2 was cyclocondensed with H2NCH2CO2Me to give title compound II which had ED50 of 4.5 + 10-5 mol/kg p.o. for protection of mice against maximal electroshock-induced convulsions.

135548-47-98

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, an analgesic and anticonvulsant)

RN 135548-47-9 CAPLUS

CN 1H-Pvrrole-2-carboxamide, 3-(4-morpholinv1)-N,4-diphenv1- (CA INDEX NAME)

L3 ANSWER 36 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1992:490132 CAPLUS Full-text

DOCUMENT NUMBER:

117:90132

ORIGINAL REFERENCE NO.: 117:15733a,15736a TITLE:

Preparation of 3-aminopyrroles as anticonvulsants and analgesics

INVENTOR(S):

Liebscher, Juergen; Knoll, A.; Ushmaev, A.; Rolfs, Andreas; Lohmann, Dieter; Faust, Gottfried;

PATENT ASSIGNEE(S):

Morgenstern, Eveline; Scharfenberg, Peter Arzneimittelwerk Dresden G.m.b.H., Germany

SOURCE:

Ger. (East), 5 pp. CODEN: GEXXA8

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. DD 298918 A5 19920319 DD 1989-340208 19891117 DD 1989-340208 PRIORITY APPLN. INFO.: 19891117 CASREACT 117:90132; MARPAT 117:90132 OTHER SOURCE(S):

GΙ

Title compds. [I; R = NR3R4; R1 = H, (cyclo)alkyl, aralkyl, (hetero)aryl, AB CONH2, etc.; R2 = H, CHO, alkoxycarbonyl, CONH2 (hetero)aryl cyano, NO2, etc.; R3,R4 = H, (cyclo)alkyl, aralkyl, (hetero)aryl; NR3R4 = heterocyclyl; R5 = (hetero)aryl; R6 = H, alkyl, aryl, halo; R5R6 = alkylene] were prepared Thus, pyrrole II (R = SH) was condensed with HNMe2 to give II (R = NMe2) which had ED50 of 4.5 + 10-5 mol/kg orally for protection of mice against maximal electroshock-induced convulsions.

135548-47-98

RN

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as analgesic and anticonvulsant)

135548-47-9 CAPLUS

1H-Pvrrole-2-carboxamide, 3-(4-morpholinv1)-N, 4-diphenv1- (CA INDEX NAME) CN

142641-86-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of analgesics and anticonvulsants)

RN 142641-86-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-chloro-N, 4-diphenyl- (CA INDEX NAME)

L3 ANSWER 37 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1992:469726 CAPLUS Full-text

DOCUMENT NUMBER: 117:69726

ORIGINAL REFERENCE NO.: 117:12263a,12266a

TITLE: Process for preparation of 3-aminopyrrolecarboxylic acid derivatives as anticonvulsants and analgesics

INVENTOR(S): Liebscher, Juergen; Knoll, A.; Ushmaev, A.; Rolfs,

Andreas; Lohmann, Dieter; Faust, Gottfried; Morgenstern, Eveline; Scharfenberg, Peter

Arzneimittelwerk Dresden G.m.b.H., Germany

PATENT ASSIGNEE(S): SOURCE:

Ger. (East), 6 pp.

CODEN: GEXXA8

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 298916	A5	19920319	DD 1989-340206	19891117

GI

Nineteen title compds. I [R1 = H, (un)substituted alkvl, (un)substituted AB cycloalkyl, aralkyl, (un)substituted (hetero)aryl, acyl, alkoxycarbonyl, (un) substituted amino (thio) carbonvl; Z = OH, O-Metal, alkoxy, arvloxy, (un) substituted amino, alkylthio, arylthio; R3 = H, (un) substituted alkyl, cycloalkyl, aralkyl, (un)substituted (hetero)aryl; R4 = (un)substituted alkyl, cycloalkyl, aralkyl, (un)substituted (hetero)aryl; or R3R4 = alkylene optionally containing O, S, or N as a ring atom; R5 = (un)substituted (hetero)aryl; R6 = H, alkyl, aryl, halo; or R5R6 = alkylene] were prepared by standard functional transformations of the carboxylic acid moiety or its derived groups. For example, I [R1 = R6 = H, Z = OMe, R3R4 = (CH2)20(CH2)2, R5 = 4-C1C6H4] (II) was prepared by standard direct esterification of the corresponding acid (Z = OH) using H2SO4 catalyst in refluxing MeOH (75% yield). II was slightly more potent than carbamazepine in the maximal electroconvulsion test in mice, and had a significantly higher protective index against neurotoxicity (36 vs. 5.1). General synthetic methods, addnl. biol. results, and capsule formulations are described.

TT 135548-47-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anticonvulsant and analgesic)

RN 135548-47-9 CAPLUS

CN 1H-Pvrrole-2-carboxamide, 3-(4-morpholinvl)-N, 4-diphenvl- (CA INDEX NAME)

L3 ANSWER 38 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1992:469725 CAPLUS Full-text

DOCUMENT NUMBER: 117:69725

ORIGINAL REFERENCE NO.: 117:12263a,12266a

TITLE.

Process for preparation of 2-substituted 3-aminopyrroles useful as anticonvulsives and analgesics

INVENTOR(S): Liebscher, Juergen; Knoll, A.; Ushmaev, A.; Rolfs,
Andreas; Lohmann, Dieter; Faust, Gottfried;
Morgenstern, Eveline; Scharfenberg, Peter

PATENT ASSIGNEE(S): Arzneimittelwerk Dresden G.m.b.H., Germany

SOURCE: Ger. (East), 6 pp.
CODEN: GEXXA8

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 298917	A5	19920319	DD 1989-340207	19891117
PRIORITY APPLN. INFO.:			DD 1989-340207	19891117
OTHER SOURCE(S):	CASREA	CT 117:69725	; MARPAT 117:69725	

R5 NR3R4

AB Nine title compds. I [R1 = H, (un)substituted alkyl, cycloalkyl, aralkyl, (heterolaryl, acyl, alkoxycarbonyl, amino(thio)carbonyl; R2 = CHO, acyl, CO2H, alkoxycarbonyl, (un)substituted amino(thio)carbonyl, (heterolaryl, NO2, cyano; R3 = H, (un)substituted alkyl, cycloalkyl, aralkyl, (heterolaryl; R4 = (un)substituted alkyl, cycloalkyl, aralkyl, (heterolaryl; R4 = alkylene bridge optionally containing O, S, or N as ring atoms; R5 = (un)substituted (heterolaryl; R6 = H, alkyl, aryl, halo; or R5R6 = alkylene bridge prepared by reaction of 2-unsubstituted I (R2 = H) with corresponding electrophiles, e.g., acid chlorides, anhydrides, or isocyanates. For example, I [R1 = R6 = H, R2 = CO2Me, R3R4 = (CH2)2O(CH2)2, R5 = Ph] (II) was prepared in 56% yield by acylation of the corresponding I (R2 = H) with CLCO2Me in refluxing MeCN. At 10-3 mol/kg orally in mice in the hot-plate test, II gave 90% inhibition, vs. 55% for analgin. General prepns., addnl. biol. results, and capsule formulations are described.

IT 135548-47-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anticonvulsive and analgesic)

RN 135548-47-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-(4-morpholiny1)-N,4-diphenyl- (CA INDEX NAME)

ACCESSION NUMBER: 1991:492063 CAPLUS Full-text

DOCUMENT NUMBER: 115:92063

ORIGINAL REFERENCE NO.: 115:15835a,15838a

TITLE: Analgesic and anticonvulsant 3-aminopyrroles, Liebscher, Juergen; Knoll, Alexander; Uschmajew, INVENTOR(S):

Alexej; Rolfs, Andreas; Lohmann, Dieter; Faust, Gottfried; Morgenstern, Eveline; Scharfenberg, Peter

PATENT ASSIGNEE(S): Arzneimittelwerk Dresden G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Pat.ent. LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PAT	PATENT NO.					DATE			APPLICATION NO.			DATE
EP	431371			A1		1991	0612		EP	1990-121958		19901116
EP	431371			B1		1997	0910					
	R: BE,	CH,	DE,	ES,	FR,	GB,	IT,	LI,	NI	, SE		
DD	298912			A5		1992	0319		DD	1989-334670		19891117
SI	20323			A		2001	0228		SI	1990-12173		19901115
FI	9005689			A		1991	0518		FΙ	1990-5689		19901116
FI	102169			В		1998	1030					
FI	102169			B1		1998	1030					
HU	56343			A2		1991	0828		HU	1990-7176		19901116
JP	03271271			A		1991	1203		JP	1990-311258		19901116
JP	07113015			В		1995	1206					
US	5502051			A		1996	0326		US	1990-614459		19901116
RU	2060991			C1		1996	0527		RU	1990-4831894		19901116
ES	2108005			Т3		1997	1216		ES	1990-121958		19901116
RU	2120796			C1		1998	1027		RU	1994-2476		19901116
US	5684160			A		1997	1104		US	1995-446000		19950519
PRIORITY	APPLN.	INFO	. :						DD	1989-334670	A	19891117
									YU	1990-2173	A	19901115
									US	1990-614459	A3	19901116

OTHER SOURCE(S): MARPAT 115:92063 GI

Aminopyrroles I [R = H, (un)substituted alkyl, cycloalkyl, aryl, heteroaryl, AB acvl, alkoxycarbonyl, carbamoyl, thiocarbamoyl; R1 = H, acyl, CO2H, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, thiocarbamoyl, aryl, heteroaryl, cyano, NO2; R2, R3 = H, (un) substituted alkyl, cycloalkyl, aralkyl, aryl, heteroaryl; NR2R3 = heterocyclic; R4 = (un)substituted aryl, heteroaryl; R5 = H, alkyl, arvl, halogen; R4R5 = alkylenel were prepared by various methods. I (R = R5 = H, R1 = CO2Me, NR2R3 = morpholino, R4 = 4-C1C6H4), had an oral ED50in the maximum electroshock test of 4.5 + 10-5 mg/kg. I (R = R5 = H, R1 = CO2H, CO2Me, NR2R3 = morpholino, R4 = Ph) caused 84.2 and 71.3% resp. inhibition of AcOH-induced writhing in mice.

IT 135548-47-9P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 135548-47-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-(4-morpholiny1)-N,4-diphenyl- (CA INDEX NAME)

L3 ANSWER 40 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:55811 CAPLUS Full-text

DOCUMENT NUMBER: 108:55811

ORIGINAL REFERENCE NO.: 108:9313a,9316a

TITLE: A simple synthesis of pyrroles AUTHOR(S): Cohnen, Erich; Dewald, Renate

CORPORATE SOURCE: Beiersdorf A.-G., Hamburg, D-2000/20, Fed. Rep. Ger.

SOURCE: Synthesis (1987), (6), 566-8 CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:55811

GI

$$\operatorname{R} = \operatorname{R}^{\operatorname{R}^1} = \operatorname{R}^{\operatorname{R}^1}$$

- AB Cyclocondensation of Me2NCH:CRCOR1 (R = CO2Et, Ac, Bz, Ph, COCO2Et; R1 = Me, Et, Pr, Ph) with R3COCHR2NH2.HC1 (R2 = CONH2, CN, Ac, CO2Et; R3 = NH2, Me) gave 35-97% 16 pyrroles I.
- IT 112381-15-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and spectra of)

RN 112381-15-4 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-methyl-4-phenyl- (CA INDEX NAME)

L3 ANSWER 41 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1971:448869 CAPLUS Full-text

DOCUMENT NUMBER: 75:48869

ORIGINAL REFERENCE NO.: 75:7709a,7712a

TITLE: Independent syntheses of the products of acid- and

base-catalyzed rearrangements of

2-(1-isoquinoly1)-3,3,5-triarylpyrrolenines AUTHOR(S): McEwen, William E.; Berkebile, David H.; Liao,

Tsung-Kai; Lin, Yun-Shan

CORPORATE SOURCE: Dep. Chem., Univ. Massachusetts, Amherst, MA, USA SOURCE: Journal of Organic Chemistry (1971), 36(11), 1459-62

CODEN: JOCEAH; ISSN: 0022-3263 English

DOCUMENT TYPE: Journal

LANGUAGE:

For diagram(s), see printed CA Issue.

AB 2-(1-Isoquinoly1)-3,4,5-triphenylpyrrole (I) and 2-(1-isoquinoly1)-3-p-anisyl-4.5-diphenylpyrrole (II) were synthesized by unambiguous methods. The synthetic samples are identical with the products of the acid- or basecatalyzed isomerization of 2-(1-isoquinoly1)-3,3,5-triphenylpyrrolenine (III)

and the base-catalyzed isomerization of 2-(1-isoquinoly1)-3-p-anisy1-3,5diphenylpyrrolenine (IV), resp. By inference, 2-(1-isoquinoly1)-4-p-anisyl-3,5- diphenylpyrrole (V) is the product of the acid-catalyzed isomerization of

IV. ΙT 28506-38-9P 28638-50-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 28506-38-9 CAPLUS

CN 1H-Pvrrole-2-carboxamide, 3,4,5-triphenvl-N-(2-phenvlethvl)- (CA INDEX NAME)

RN 28638-50-8 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-(4-methoxyphenyl)-4,5-diphenyl-N-(2phenvlethvl) - (CA INDEX NAME)

L3 ANSWER 42 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1969:87561 CAPLUS Full-text

DOCUMENT NUMBER: 70:87561 ORIGINAL REFERENCE NO.: 70:16353a

TITLE: 4-Phenylpyrrole-2-carboxylic amides INVENTOR(S): Hattori, Kiyoshi; Hashimoto, Masashi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd.

SOURCE: Jpn. Tokkvo Koho, 2 pp.

CODEN: JAXXAD DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 44001528 B4 19690123 JP 19660721

AB Manufacture of 3-chloro-4-(2-nitro-3-chlorophenyl)pyrrole-2-carboxamide (I), useful as a muscle relaxant, is described. Thus, 320 mg. 3-chloro-4-(2-nitro-3-chlorophenyl)pyrrole-2-carbonitrile is stirred with 7 cc. Me2CO, 250 mg. NaOH, and 3 cc. H2O, then stirred 30 min. more with 0.5 cc. 30% H2O2, let stand overnight with 1 cc. H2O, concentrated in vacuo, 10 cc. H2O added, and the precipitate recrystd. (AcOEt-C6H6) to give 76 mg. I, m. 202-3°.

21765-13-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 21765-13-9 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 3-chloro-4-(3-chloro-2-nitrophenyl)- (CA INDEX

L3 ANSWER 43 OF 43 CAPLUS COPYRIGHT 2008 ACS on STN 1961:144086 CAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 55:144086

ORIGINAL REFERENCE NO.: 55:27263f-i,27264a-i,27265a-i,27266a-e

TITLE: A new route to the synthesis of the pyrrole ring

system

AUTHOR(S): Dimroth, Karl: Pintschovius, Ulrich

CORPORATE SOURCE: Univ. Marburg, Germany

Justus Liebigs Annalen der Chemie (1961), 639, 102-24 SOURCE:

CODEN: JLACBF; ISSN: 0075-4617

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 55:144086

GI For diagram(s), see printed CA Issue.

N-Alkyl, N-aryl, or N-acylamines, containing in α, α -positions 2 CH2 groups activated by carbalkoxy or nitrile groups, condensed with Bz2 in the presence of Me3COK in 60-80% yields to 1-alkyl(aryl or acyl)-3.4-diphenylpyrrole derivs. bearing in the 2- and 5-positions CO2H, carbalkoxy, CN, or carboxamide groups. The free pyrrole- α -carboxylic acids were readily decarboxylated by acids to the α, α '-unsubstituted pyrroles. The 1-acylpyrroles were hydrolyzed by bases to the pyrroles. The preparation of suitable CH2-containing amine components was described. A simple cyanomethylation procedure with polyoxymethylene (I), KCN, and AcOH was described for the conversion of aromatic amines to the previously unknown bis(cyanomethyl) derivs. Crude PhN(CH2CO2H)2 (55 g.), 250 cc. MeOH, and 20 cc. concentrated H2SO4 refluxed 7 hrs., concentrated in vacuo, diluted with iced H2O, and extracted with Et2O gave 73% PhN(CH2CO2Me)2 (II), b10 183°, m. 47-9°. Similarly prepared was PhN(CH2CO2Et)2, b10 188°. p-MeOC6H4NH2, 1 mole ClCH2CO2H, and 1.5 moles NaOAc.3H2O were converted to p-MeOC6H4NHCH2CO2H, which, heated 5 hrs. with 2.5 moles C1CH2CO2Na on the steam bath and then esterified in the usual manner with MeOH-H2SO4, gave p-MeOC6H4N(CH2CO2Me)2 (III), b11 209°; III.HC1, m. 136-7° (absolute MeOH). p-MeC6H4NH2 was converted similarly to p-MeC6H4N(CH2CO2Me)2 (IV), b10 186°, m. 44.5-45°. p-C1C6H4NHCH2CO2H (40 g.) in dilute aqueous solution of 8.7 g. NaOH treated below 35° with a solution of 70 q. C1-CH2CO2H and 30 q. NaOH (total volume of mixture about 500 cc.), heated 4-5 hrs. on the water bath, cooled, and filtered, and the residue treated with 80 cc. 6N HCl gave p-ClC6H4N(CH2CO2Me)2 (V), b10 202-3°, m. 58-9°. p-H2NC6H4CO2H (13.7 g.) and 4 g. NaOH in H2O treated with aqueous C1CH2CO2Na from 28.5 g. ClCH2CO2H, heated 8 hrs. on the water bath, cooled, and filtered, and the residue treated with HCl gave 54% p-HO2CC6H4N(CH2CO2H)2 (VI), decomposing 260°. VI (15 g.), 50 cc. MeOH, and 6 cc. H2SO4 heated 7 hrs. on the water bath gave 14.8 q. p-MeO2CC6H4N(CH2CO2Me)2 (VII), m. 91-2° (EtOH or ligroine); VII.HCl decomposing 85-90°. II in CC14 or AcOH treated with the calculated amount of Br at room temperature gave p-BrC6H4N(CH2CO2-Me)2 (VII), m. 64-6°, bl0 216°; VII. H Br decomposing 130-1° (MeCN or EtCOMe). II (10 q.) in 100 cc. AcOH treated with stirring and cooling with 3.3 cc. colorless 100% HNO3 and poured after a few min. onto ice vielded 75-80% (crude) p-O2NC6H4N(CH2CO2Me)2 (VIII), yellow-brown needles with a bluish luster, m. 123-3.5° (CC14 or MeOH). Similarly prepared was p-02NC6H4N(CH2CO2Et)2 (IX), 87%. m. 137°, which (hydrolyzed with alkali) gave p-O2NC6H4N(CH2CO2H)2, decomposing 202-5°. VIII reduced with Na2S2O4 in aqueous EtOH and extracted with CHCl3 gave p-H2NC6H4N(CH2CO2Me)2, m. 53-5°, b0.01 156-9°; HCl salt decomposing 205-6°. NaHSO3 (208 g.) in a min. of H2O treated with 150 cc. 40% aqueous CH2O, the mixture treated after 20 min. with stirring with 100 g. 30% agueous MeNH2, heated 20 min. on the water bath, treated with 134 g. KCN in 250 cc. H2O, saturated with NaCl, and extracted with Et2O vielded 48% MeN(CH2CN)2 (X), b11 130°; X.HCl decomposing 120-2°. p-O2NC6H4NMe2 (33 g.), 18.7 cc. 38% CH2O, and 26 g. NaHSO3 heated 15 min. at 100° with occasional shaking and treated with 16.5 g. KCN in 30 cc. H2O yielded 31.5 g. crude p-Me2NC6H4N(CH2CN)Me (XI), m. 80°. Powdered KCN (8 g.), 14 g. XI, and 2.8 g. I treated with cooling with 65 cc. AcOH, heated 1 hr. at 50°, stirred several hrs., and poured into iced H2O gave 13.6 g. p-Me2NC6H4N(CH2CN)2 (XII), m. 127-8.5° (BuOH-EtOH); XII.HC1 decomposing 207-10° (85% EtOH). NaHSO3 (35 g.) and 25 cc. 38% aqueous CH2O treated on the water bath with 41 g. p-MeOC6H4NH2 and then with 22 g. KCN in 50 cc. H2O and heated 20 min. on the water bath gave 42 g. p-MeOC6H4NHCH2CN (XIII), m. 75-6° (MeOH or CCl4). XIII (15.2 g.), 8.5 g. KCN, and 3.8 g. I treated dropwise with stirring and cooling with 100 cc. AcOH containing 3 drops concentrated H2SO4, heated 4 hrs. at 40-50°, and kept overnight yielded 18.3 g. p-MeOC6H4N(CH2CN)2 (XIV), m. 114-15°, b9 221.5°. PhNHCH2CN (26.4 g.), bl1 63°, with 17 g. KCN, 7.6 g. I, and 150 cc. AcOH gave 80% (crude) PhN(CH2CN)2 (XV), leaflets, m. 139-40° (BuOH). II with absolute EtOH and NH3 gave PhN(CH2CONH2)2 (XVI). XVI (10 g.) in 25 cc. Decalin heated 0.5 hr. at 180° with 10 q. P205 and extracted with C6H6 gave some XV; the mother liquor

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vielded 4-phenvl-2.6-piperazinedione, m, 159-60°, p-MeC6H4NHCH2CN (20.5 g.),
11.5 q. KCN, 5.3 q. I. and 100 cc. AcOH gave 88% p-MeC6H4N(CH2CN)2, m. 119-20°
(MeOH), b11 207°, p-MeC6H4NHCH2CO2Me (27 g.) (from 10 g. p-MeC6H4NH2 and 5.1
g. C1CH2CO2Me), m. 84-6°, 12.5 g. KCN, 6 g. I, and 100 cc. AcOH kept at 35°
and then heated 2 hrs. at 50° gave 32.1 g. p-MeC6H4N-(CH2CN)CH2CO2Me (XVII),
b10 195-5.5°, m. 80-1°. p-MeC6H4NHCH2Bz (14 q.) with 5 q. KCN, 2.3 q. I, and
60 cc. AcOH yielded (at 40°) p-MeC6H4N(CH2CN)CH2Bz, greenish crystals, m. 153-
4.5°. PhNH2 (9.3 g.) and 35.2 g. iso-Pr2NEt treated at 0° with stirring with
40 g. BzCH2Br in 40 cc. CHC13 and the mixture refluxed 0.5 hr., cooled, and
filtered vielded 17.7 g. PhN(CH2Bz)2 (XVIII), m. 225-8° (MeOCH2CH2OH).
BzCH2NHPh (26 g.) with 28.2 g. BzCH2Br and 17 g. iso-Pr2NEt refluxed in 40 cc.
CHCl3 gave XVIII. III (2.7 g.) and 1.5 g. (CO2Et)2 (XIX) treated with 0.9 g.
Na in 20 cc. MeOH, kept several days, warmed, and filtered, and the residue
treated with HCl gave 1-(p-methoxyphenyl)-3,4-dihydroxypyrrole-2,5-
dicarboxylic acid di-Me ester (XX), m. 185-8° (with gas evolution) (MeOCH2-
CH2OH and EtCOMe). IX (4.0 g.) and 2.2 g. XIX in 60 cc. Me3COH treated at 50°
with 1.2 g. K in 40 cc. Me3COH, kept 15 hrs., and evapd, in vacuo, and the
residue extracted with MeOH gave 1-(p-nitrophenyl)-3,4-dihydropyrrole-2,5-
dicarboxylic acid di-tert-Bu ester, m. 176-8° (AcOH, EtOH, and ligroine); it
gave a green FeCl3 reaction. BzH (5 cc.) and 5 g. II in 20 cc. MeOH added
dropwise at 2-5° to 2 g. Na in 30 cc. absolute MeOH, kept 2 hrs. at 0°,
evaporated in vacuo below 30°, treated with cold HCl, and extracted with MeOH
yielded 1.5 g. PhN[C(:CHPh)CO2H]2, greenish yellow crystals, m. 161-3°; the
mother liquor gave PhCH: C.NPh.CH2.CHPh.O.CO, m. 223-5° (decomposition) (85%
AcOH); the filtrate diluted with CH2Cl2 precipitated a Na salt, which
(triturated with concentrated HCl) gave BzCO2H, m. 14750°; it gave a dark
green FeCl3 reaction. The filtrate from the BzCO2H treated with Br gave 2,4-
Br2C6H3NHCH2CO2H, prisms, m. 161° (petr. ether). Bz2 (5.3 g.) and 6.0 g. II
in 30 cc. dry Et2O added dropwise with cooling and stirring to 4 g. K in 60
cc. absolute Me3COH and 20 cc. dry Et2O, the mixture kept 20 hrs. and
evaporated below 40^{\circ} in vacuo, and the residue treated with a small amount of
H2O gave 1.3 g. yellow K salt (yellow in concentrated H2SO4), which (recrystd.
from AcOH with heating) gave 1,3,4-triphenylpyrrole, needles, m. 150-7°,
intense orange in concentrated H3SO4; it coupled with diazonium salts in AcOH.
III (10 g.), 7.0 g. Bz2 in 50 cc. Et2O, and 5 g. K in 90 cc. Me3COH gave (in
the usual manner during 20 min.) the 2-CO2Me derivative (XXI) of 1-(p-
methoxyphenyl)-3,4-diphenylpyrrole (XXII), m. 169.5-71° (iso-AmOAc), and from
the mother liquor the 2-CO2CMe3 derivative (XXIII) of XXII, needles, m. 128-9°
(absolute EtOH). XXI refluxed 4 hrs. with 10% alc. KOH gave the carboxylic
acid, m. about 200°, which (heated with a little H2SO4) gave XXII, prisms, m.
109-10° (EtOH). XXIII refluxed 5 hrs. with 5 drops concentrated HCl in 25 cc.
EtOH gave also XII. IV (6.0 g.), 5.0 g. Bz2, and 4 g. K in 90 cc. Me3COH and
20 cc. Et20 neutralized after 4 hrs. with HCl. filtered, and evaporated gave 6
g. (crude) 1-(p-MeC6H4) analog (XXIV) of XXI, prisms, m. 130.5-31° (5:1 MeOH-
C6H6). XXIV refluxed 4 hrs. with alc. KOH and decarboxylated with
concentrated H2SO4 vielded the 2-CO2H derivative (XXV) of 1-(p-MeC6H4) analog
(XXV) of XXII, m. 179-82^{\circ}, which, recrystd. from AcOH and ligroine, yielded
XXV, leaflets, m. 130-1° (AcOH-ligroine). Bz2 (5 g.) and 6.7 g. V condensed
in the usual manner, treated after 4 hrs. with 10 cc. concentrated HCl,
filtered, and kept some time at room temperature deposited 2.3 g. 1-(p-ClC6H4)
analog (XXVI) of XX, m. 204.5-205°, with gas evolution (BuOH-EtOH and MeNO2),
yellow in concentrated H2SO4; the mother liquor evaporated gave the p-C1C6H4
analog (XXVII) of XXI, prisms, m. 118-20° (EtOH and AcOH). XXVI and XXVII
saponified with alkali and decarboxylated gave the 1-(p-ClC6H4) analog of
XXII, m. 145-6° (AcOH or EtOH). K (3.8 g.) in 70 cc. Me3COH, 4.6 g. Bz2 in 20
cc. Et20, and 7.6 g. VII in 30 cc. Me3COH heated 3 hrs., neutralized with HCl,
and filtered, and the filtrate concentrated gave 3.0 g. (crude) 1-(p-BrC6H4)
analog (XXVIII) of XX, prisms, m. 190-1° (3:1 BuOH-EtOH). XXVIII saponified
with alkali and heated with H2SO4 gave the 1-(p-BrC6H4) analog of XXII, m.
135-7° (ligroine and AcOH). VI (5.5 g.) and 4.5 g. Bz2 in 160 cc. Et20
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treated 20 min. at 5° with 7.4 g. K in 85 cc. Me3COH, the mixture evaporated in vacuo, adjusted with HCl to pH 8, and filtered, and the resinous residue (10 g.) refluxed 2 hrs. with alc. KOH, acidified, and ground with AcOH gave 1.6 q. 1-(p-HO2CC6H4) analog of XXII, m. 241-3°, with browning (AcOH and AmoAc), yellow in concentrated H2SO4. VIII (7 g.), 5 g. Bz2, and 3.8 g. K in 65 cc. Me3COH, 90 cc. Et2O, and 70 cc. dioxane kept 1 hr. at 5°, treated with 5 cc. AcOH, and evaporated, the residue washed with H2O and dissolved in CHC13, and the CHC13 solution washed with aqueous NaHCO3 (to remove about 0.6 g. organic acid) and evaporated gave a substance, m. 211-13° (light red in concentrated H2SO4), which could not be eluted from Al2O3 when chromatographed; the mother liquor chromatographed twice on Al203 gave the 1-(p-O2NC6H4) analog (XXIX) of XXI, m. 193-5° (EtCOMe, AcOH, BuOH), intense orange-yellow in concentrated H2SO4; it gave a red dye with diazonium salts. K (3.4 g.) in 70 cc. Me3COH, 5 g. XIV, and 5 g. Bz2 in dioxane-Me3COH treated with AcOH, evaporated in vacuo, and extracted with H2O left 9.8 g. 1-(pmethoxyphenyl)3,4-diphenyl-2-cyanopyrrole-5-carboxamide (XXX), prisms, m. 248.5-49° (BuOH). XVII (5.5 g.), 3.5 g. K in 100 cc. Me3COH, and 5.3 q. Bz2 in 50 cc. Me3COH and 7 cc. dioxane treated with AcOH yielded similarly 8.2 q. 2-CN derivative of XXV, m. 142-2.7° (AcOH and ligroine). XII (4.3 g.) condensed during 2 hrs. with 4.2 q. Bz2 and 3.4 q. K in 50 cc. Me3COH and 50 cc. dioxane and evaporated, and the residue ground with warm MeOH and diluted with C6H6 precipitated the 1-(p-Me2NC6H4) analog (XXXI) of XXX, m. 283°, with browning at 270° (HCONH2); the mother liquor gave 1-(p-dimethylaminophenyl)-3,4-dihydroxy-3,4-diphenyl-2,5-dicyanopyrrolidine (XXXII), m. 221-3° (decomposition), which (triturated with 33% HCl) gave XXXII.HCl. K (4 g.) in 65 cc. Me3COH condensed at 0° with 3.3 g. X and 6.3 g. Bz2 in 75 cc. Et2O, the mixture kept overnight and filtered, and the residue triturated with 80% AcOH gave 6 g. 1-Me analog of XXX, m. 276° colorless in concentrated H2SO4; the mother liquor gave a small amount of 1-methyl-3,4-diphenyl-2,5-dicyanopyrrole, m. 159-61° (90% EtOH). K (4 g.) in 85 cc. Me3COH and 10 cc. Et2O condensed with 5.25 g. Bz2 and 7 g. AcN(CH2CO2Me)2, m. 83.5-84°, b15 184°, in 40 cc. Me3COH and 15 cc. dioxane, the mixture evaporated, washed with Et2O, dissolved in H2O, and acidified with HCl gave 1-acetyl-3,4-diphenylpyrrole-2,5dicarboxylic acid (XXXIII), m. 254-5° (decomposition) (aqueous MeOH); the Et20-insol. residue chromatographed gave the Me ester (XXXIV) of XXXIII, m. 143-4° (MeOH). The residue from the Et2O washing (4.6 q.) ground with MeOH and recrystd, repeatedly from PhMe-ligroine gave 3,4-diphenylpyrrole-2carboxylic acid tert-Bu ester, leaflets, m. 164-5°, yellow in H2SO4. XXXIV refluxed 3 hrs. with 1.3 g. KOH in 20 cc. EtOH gave 3,4-diphenylpyrrole-2carboxylic acid, m. 205-7°. BzN(CH2CN)2 (4 g.), m. 131-2°, and 4.1 g. Bz2 in 40 cc. dry tetrahydrofuran and 35 cc. dry MeCN treated 1.5 hrs. with 1.6 g. K in 40 cc. Me3COH and 50 cc. dry C6H6, stirred 3.5 hrs. at 20°, treated with 3.4 g. AcOH, filtered, and concentrated in vacuo to 1/3 volume yielded 1.3 g. 1-Bz analog (XXXV) of XXX, m. 239-41° (decomposition) (EtOH and iso-PrOH); the concentrated filtrate from the crude product diluted with Et20 gave 3,4diphenyl-2-cyanopyrrole-5-carboxamide (XXXVI), m. 294-7° (decomposition) (iso-Am20 and MeOH). XXXV refluxed 8 hrs. with 4% alc. KOH gave 1.15 g. XXXVI, needles, m. 299-300° (MeCN-iso-PrOH). K (6.3 g.) in 100 cc. Me3COH added to 9 g. acenaphthenequinone and 10 g. II in 50 cc. dry C6H6, refluxed 0.5 hr. and evaporated in vacuo, the residue extracted with Na2CO3, and the extract acidified carefully precipitated a mono-Na salt, which (with HCl) yielded 1.2 g. 1-phenyl-3, 4-dihydroxy-3, 4-(1,8- naphthylene)pyrrolidine-2,5-dicarboxylic acid, decomposing 221-2° (AcOH and 1:1 aqueous Me2CO). XXXII (7 g.) in 100 cc. dry dioxane with 4.5 g. Bz2 and 2.2 g. K in 40 cc. Me3COH heated 5 hrs. at 35°, adjusted with HCl to pH 5, and filtered, and the filtrate evaporated gave about 1 q. 1-phenyl-2,5-dibenzoyl-3,4-dihydroxy-3,4-diphenylpyrrolidine, yellowish needles, decomposing 221-4° (Et2CO), pale red in warm concentrated H2SO4. The infrared absorption spectra of XII, XXXI, and XXXII were recorded. 101605-72-5F, Pyrrole-2-carboxamide, 5-cvano-3,4-diphenyl-

101895-84-5P, Pyrrole-2-carboxamide,

5-cyano-1-methyl-3,4-diphenyl-

RL: PREP (Preparation) (preparation of)

RN 101605-72-5 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-cyano-3,4-diphenyl- (CA INDEX NAME)

RN 101895-84-5 CAPLUS

CN 1H-Pyrrole-2-carboxamide, 5-cyano-1-methyl-3,4-diphenyl- (CA INDEX NAME)

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